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ABSTRACT

This is a report of students who entered as freshmen in the fall of 1956 and the fall of 1957, and of students enrolled at all undergraduate levels during the 1956-57 academic year at 20 institutions of higher education in the U.S. The report discusses: (1) applications, admissions, and registration; (2) admitted applicants who failed to register (no-shows); (3) undergraduate students who discontinued attendance (dropouts); (4) comparative qualifications and characteristics of no-shows, dropouts, and active students; (5) sources of funds for defraying college expenses: family income, student employment, and scholarship assistance; and (6) reactions of active students and dropouts to college experiences. The major findings include: (1) students file a mean of 3.2 applications for admission to college; (2) approximately 85 percent of the admitted applicants enroll in some institution of higher education the same year they apply; (3) about two-thirds of the students admitted to college but not enrolled attribute nonenrollment to financial reasons; and (4) more than 45 percent of the dropouts attribute their withdrawal to academic difficulties. (AF)

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COLLEGE APPLICANTS ENTRANTS DROPOUTS

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HIGHLIGHTS

This is a report of the findings of 20 cooperating institutions of higher education in a study of students who entered as freshmen in the fall of 1956 and the fall of 1957 and of students at all undergraduate levels enrolled during the academic year 1956–57. The 20 institutions in the study are not to be considered representative of the more than 2,000 colleges and universities in the United States, nor can the students involved be considered to represent all college students. The findings do represent the diligent efforts of a few institutions to study in depth selected facets of college life about which too little is known.

Students file a mean of 3.2 applications for admission to college. The colleges approve about 62 percent of the applicants for admission without condition. Approximately 85 percent of the admitted applicants enroll in some institution of higher education the same year they apply.

A distribution which includes the *total amounts* paid by individuals as application fees yields a median payment of $12.00, whereas a distribution which includes only *those individuals* who paid such fees yields a median payment of $23.00. There are indications that application fees do not tend to reduce the number of applications filed per applicant.

About two-thirds of the nearly 15 percent of students admitted to college for the first time who do not enroll in any college attribute non-enrollment to financial factors. More than one-fifth of those who fail to enroll report no further interest in attending college.

Among the reasons students give for their choice of institution, scholastic standing ranks first, followed by scholarship assistance, lower costs, and curricular offerings.

More than 45 percent of the dropouts from the 20 colleges attribute their withdrawal to academic difficulties. Specifically, poor grades account for almost one-fourth of the attrition. Health and family reasons (including marriage) rank second, and financial factors, third. Many students receiving college scholarship awards become dropouts, particularly in institutions under private control.

Both active students and dropouts depend more heavily on the family than on any other source for funds to defray college expenses. The mean percent of college-going expenses defrayed from personal savings by active students is 20 and by dropouts, 23.

More than 45 percent of undergraduate students are employed during the academic year. The mean number of hours worked per week by those who work is 18. There is a positive relationship between the size of the community in which a college is located and opportunities for student self-help through earnings while in college.

College attendance is not restricted to children of high-income families. More than one-fourth of the students estimate their family incomes at levels below the national median.

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COLLEGE APPLICANTS ENTRANTS DROPOUTS

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FOREWORD

This study springs from one undertaken in the fall of 1950 to find answers to the questions: Who goes to college? Who doesn't? Why?

That study, based on samples of the classes entering 147 colleges and universities in 1950, was published in 1958. Entitled *Retention and Withdrawal of College Students,*[1] it demonstrated a complexity of causes for college dropout so great that even before it was published the Office of Education began the present study, which explores not only these causes of dropout but also the causes of a related problem—failure of high school graduates to enroll in institutions of higher education which have accepted them.

For the present report, 20 of the 147 colleges and universities studied earlier were selected for re-study in greater depth. Under Cooperative Research Program contracts with the Office of Education, each institution probed the individual reasons for not enrolling given by students who had been admitted, the factors contributing to the discontinuance of students who had registered, and the attitudes of enrolled students toward conditions on the campus. They identified the relationships between student decisions and institutional policies and procedures.

The 20-college study covered students who entered as freshmen in the fall of 1956 and the fall of 1957 and all undergraduates enrolled during the academic year 1956-57.

As investigations proceeded on the 20 campuses — and even later, through 1964, while data from the 20-college study were being processed and analyzed — the Office of Education was following numerous other studies covering one or more of the same areas covered by the 20-college study. These other studies, while not always on the same basis as the Office of Education project, were found to produce findings paralleling it to a remarkable degree.

Taken together, the 20-college study and the other studies furnish current reading on the thinking of college applicants, registrants, and dropouts as it has been observed over a period of more than eight years.

This study has value for all citizens with a direct interest in who attends college, who does not, and why. It has major implications for parents and prospective college students; for high school and college counselors; for faculties and for those who administer or govern colleges; and for legislators and others who provide financial support for higher education. All of these groups, along with professional students of higher education, are indebted to the institutions and individuals who participated in the study on which this report is based.

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[1] By R. E. Iffert. Bulletin 1958, No. 1. Washington: U.S. Government Printing Office, 1957.

This study was financed in part by an Office of Education Cooperative Research contract of $75,000 which was allocated among the 20 participating institutions, and by funds and services contributed by these institutions. The report would not have been possible without the cooperation of thousands of students who provided the basic information, and of hundreds of professional and clerical workers in the 20 cooperating colleges and universities who labored to assemble the data and prepare institutional reports.

Meritorious service was rendered by Eleanor Dolan of the American Association of University Women and Allen Jones of the Montgomery Junior College in reviewing institutional reports and extracting descriptive information.

In the interest of economy, summaries of the institutional reports are not published as a part of this volume, as was originally planned. A copy of each summary is on file in the Division of Educational Organization and Administration and in the Division of Educational Research of the Office of Education, and they may be consulted by research workers interested in the detailed case studies.

R. ORIN CORNETT,
Director, Division of Educational Organization and Administration.

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Chapter 1

Introduction

The model representing the status of higher education in the United States today is drastically different from that for a generation ago, and will not suffice for the next generation. The percentage of youth who graduate from high school is increasing and the percentage of high school graduates who seek admission to college is also increasing. College enrollments represent a wider range both in age and ability. Efforts of the higher education community to provide staff and facilities to meet the demands have been only partly successful.

High on the list of measures being taken to husband resources is improvement in the methods and standards of college student selection. The operation is complicated by the fact that the student, with or without the influence of parents and counselors, selects the institutions to which he or she applies and eventually selects the one institution among the two or more which may grant admission. The institution is thus placed in double jeopardy because it cannot select either its applicants or its admittants. It is, in effect, limited to selection among its applicants. The characterization of a college or university as highly selective is highly ambiguous.

Numerous institutions of higher education have made, and are making, analytical studies of their records of student applications, entrants, and dropouts, but because uniform definitions and procedures are not followed it is not possible to make interinstitutional comparisons. To the uninitiated, it may appear to be a simple task to arrive at a consensus on what constitutes an application for admission to college. Institutional procedures and practices vary from the requirement that the student first obtain permission to apply, to the enrollment of students whose first contact with the institution is on registration day. Differences in practices and policies complicate the derivation of a definition of an enrollee. Universal acceptance of a viable definition of a dropout is yet to be attained. Students of exceptional ability who discontinue their education after completing a liberal arts program are often more properly classifiable as dropouts than students of limited academic ability who accept employment with on-the-job training opportunities after one or two years of college attendance.

Only when conflicting practices and philosophies have been resolved and common terminology has been accepted and uniformly observed can comparable data be assembled. Recognition of this necessity prompted 20 colleges and universities in cooperation with the American Association of Collegiate Registrars and Admissions Officers and the U.S. Office of Edu-

cation to launch a cooperative study in which uniform definitions would be developed and used in the enumeration of experiences with applications, admissions, enrollments and dropouts. Twenty institutions, 10 publicly and 10 privately controlled 4-year colleges and universities, participated in this cooperative study. The following operating definitions were adopted by mutual agreement.

1. An *applicant* is a prospective student who has filed, in proper form, an application for admission to the class entering at a specified time as a first-time-in-any-college student in one of the undergraduate schools, colleges, or departments of a specific institution. He must have submitted, or caused to be submitted, certificates, credentials, and deposits as required by the institution to permit a firm determination regarding eligibility for admission. Advanced standing or transfer applications are not included.

2. An *admission* is an applicant to whom the institution has issued an official notification of acceptance, admission, or invitation to enroll, including those admitted conditionally or on probation. A student who could have enrolled on an earlier date because of prior admission should be included if re-application was not required. Prior admission does not count if re-application and re-admission are required.

3. A *registrant* must qualify as an admission, must be formally enrolled, must have paid or arranged for payment of tuition, fees, deposits and other prescribed charges, and must have necessary credentials for admission to classes.

4. A *no-show* is an admitted applicant who does not register and who has not informed the institution of no intent to do so in time to permit the institution to arrange other admissions.

5. An *active* student is a registered undergraduate in attendance, part-time or full-time, during the period of study.

6. A *dropout,* for the purposes of this study, is any undergraduate registrant who withdraws, voluntarily, or involuntarily, from the institution during the academic year. Transfers from one school or program to another within the institutions are not counted as dropouts. A student who is granted an official leave of absence but is not currently enrolled is counted as a dropout.

The general observance of those definitions has made it possible to combine and to compare the data for the 20 participating institutions. It is also possible to compare the data in certain areas with those assembled in the longitudinal study of students entering higher education in 1950. This study, reported in a bulletin entitled *Retention and Withdrawal of College Students* in 1958, included the 20 institutions in the present study among the sample of 147 that were selected to represent the universe of undergraduate higher education in the United States.

The primary objectives which the 20 cooperating institutions set for themselves were:

1. To determine the number of applications for admission filed per applicant; the number of applicants admitted, and the number of admitted applicants who registered;

2. To study the factors associated with the failure of admitted applicants to register;

3. To examine the influence of academic, financial and other factors upon persistence in college.

Each institution collected information, analyzed the data, and submitted reports of its findings in the following areas:

(1) Numerical tabulations of applications, admissions, and registrations of first-time students in the fall of 1956 and 1957, involving approximately 100,000 applications among the 20 colleges.

(2) Investigation of the reasons why "no-shows," students who were approved for admission but did not enroll in the study institutions, entered other institutions or did not enroll at any institution. Special attention was given to the impact of economic factors and to the academic promise of this group, as measured by high school and placement test standing. Approximately 7,600 students furnished detailed information.

(3) Inquiry into the reasons for dropout of 2,000 students from the 4 undergraduate classes during the 1956–57 academic year, with emphasis on the importance of college experiences and of financial factors in the decision to withdraw.

(4) Investigation of a sample of 11,000 active students from the 4 classes during the 1956–57 academic year, for the purpose of ascertaining the relative influence of academic status, economic status, and personal experiences on the persistence pattern.

Because funds were being provided to defray part of the cost to the institution in the 20–college study, it was agreed that primary data would be assembled by each institution and submitted to the Office of Education in tabular form. Inevitably, the natural tendency of institutions of higher education to be individualistic interfered at times with the establishment of uniform procedures. For example, not all institutions made the same basic cross-tabulations. This deficiency is reflected in the summary report which leaves many questions unanswered because of insufficient comparative data in some areas. Similar difficulties arose in arriving at universally applicable definitions of "no-shows" and "applicants for admission."

Compromises in the interest of usefulness have made it impossible to maintain absolute consistency in the numbers of cases appearing in the several tables. Variability in item response combined with variability in institutional coverage account for a great majority of the apparent discrepancies. One institution, prior to the initiation of the cooperative study, had sent questionnaires similar to those developed for the 20–college study and, at the time, it was believed that the results would be sufficiently comparable

to permit their use. Integration with the group study was possible in only a very limited number of items. Another institution was unable to carry the study through to its conclusion and reported only part of the data.

A further point that should be noted is that quantitative differences which are described as significant in this report have been tested statistically and the probabilities are that, in 100 repeated measurements, the greater would become the smaller no more than 5 times. Since the institutions concerned in this study were not a probability sample of higher educational institutions or of any subgroup having specified characteristics (e.g., public or private), the representativeness of the findings is uncertain even where differences are found to be statistically significant.

The limitations are reported here not to detract from the value of the study but to enable the reader to understand the repeated warnings against universal application. The data reflect the existence of wide diversity among institutions of higher education in the character and scope of the problems with which they contend in the recruitment and retention of students. These are pressing problems now, and will continue to defy final solution, but the 20 colleges have done some pioneering work toward resolving a number of the issues.

Chapter 2

Applications, Admissions, and Registrations

The strategists in the college admissions corps are greatly concerned about the problems of under- and over-admission of prospective students. They must send letters of acceptance to more applicants than their instructional and housing facilities can accommodate. Multiple applications and multiple admissions make gamblers of admissions officers. Players of the game can reduce, but not eliminate, the risks. Until the system is changed, there will be too many no-shows in some institutions and too few in others with resulting wastes and inefficiencies which are in part responsible for the rising costs of higher education.

To reduce the risks, strategists must give more attention to measures designed to get the right students into college, and into the right college. The individual institution must decide what students it wants and how it will attract them. To do this, a college must use its accumulated experience and information as the bases for its decisions. However, experience of other schools, such as this study presents, is valuable because it clarifies the problems and suggests some solutions.

The 20 cooperating institutions furnished information on the number of applications received for admission as first-time college students, the number approved for admission, and the number of registrations during 1956 and 1957. No-shows — admitted applicants who did not enroll — received an inquiry from the participating institution or institutions in which they did not enroll. Some of the institutions in the study, depending on size as measured by total undergraduate enrollment, requested information from all of the no-shows; others, from only a sample. Hence, any attempt to expand the figures to represent regional or national dimensions would be extremely hazardous. Table I shows, for 1956 and 1957, a summary of the total numbers applying, the numbers and percentages of applicants admitted, and the numbers and percentages of those admitted who registered in the year they were admitted.

The data suggest that the transition from high school graduation to college registration is not without its casualties. There are more high school graduates than college applicants, more applications than applicants, more applicants than admissions, more admissions than registrations, and more registrations than college graduations. This generalization is well known, but the magnitude of losses at the several levels is not. Of nearly 50,000 applicants for admission to the 20 colleges in the fall of 1956, 30,504, or 61.1 percent, were admitted. Of that number, 21,780, or 71.4 percent,

TABLE 1. — *Number and percent of applications, admissions, and registrations, by institutional control: Fall 1956 and 1957*

Item	1956	1957
Total number applications received	49,936	51,873
Public	27,672	29,919
Private	22,264	21,954
Total number applicants admitted	30,504	32,947
Public	20,649	22,992
Private	9,855	9,955
Percent of applicants admitted	61.1	63.5
Public	74.6	76.8
Private	44.3	45.3
Total number admitted applicants registered	21,780	22,585
Public	15,198	15,737
Private	6,582	6,848
Percent of admitted applicants registered	71.4	68.7
Public	73.6	68.5
Private	66.8	68.8
Percent of total applicants registered	43.6	43.5
Public	54.9	52.6
Private	29.6	31.2

NOTE: Where one of a pair of percentages is underlined, the difference between the corresponding percentages by years is statistically significant at the 0.05 level.

registered in the institutions which reported the admission. Institutions under public control admitted about three-fourths of those who applied; privately controlled institutions admitted considerably fewer than half of their applicants. About three-fourths of those admitted to public institutions and about two-thirds of those admitted to private institutions registered. The difference between the percentages of applicants admitted by publicly versus privately controlled institutions was significant for each year. The percentage of admitted applicants who registered in 1956 in publicly controlled institutions was significantly higher than the corresponding percentage for privately controlled institutions; the difference between these percentages in 1957 was not significant.

For the 2-year period, the 20 institutions received 101,809 applications, admitted 63,451 applicants, and registered 44,365 admittants. One thousand applications (assuming that no applicant filed more than one application with these institutions) resulted in 632 admissions and 436 enrollments. Twenty-six admittants, 14 percent of the 187 admittants who did not register at any of the 20 colleges, did not enroll in any other college, Thus, 161 enrolled elsewhere. This number plus 436 who registered in the 20 institutions makes a total of 597 per 1,000 applicants who entered college.

It is apparent that these ratios cannot be used to represent the national scene because, for the decade ending in 1963, the ratio of first-time college registrations per 1,000 high school graduations was 550. To maintain nationally the ratios found for the 20 colleges and universities would require that either (1) 99 percent of all the applicants be admitted, or (2) that 79 percent of all high school graduates apply for admission to college. The calculation would be much simpler if the one-applicant-one-application situation prevailed.

Institutional analysis of applicant-application ratios as well as applicant-admission and admission-registration ratios will be helpful in the multiple application game that higher educational institutions generally are forced to play. The mean number of applications required to produce 1 enrollment in the 20 institutions during the years covered by this study was 2.3. In 1962 a College Entrance Examination Board study[1] reported that 3 applications produced 1 freshman enrollee in 270 colleges in 1961 as compared with 2.6 in 213 colleges in 1957. In terms of admitted applicants, the information obtained from the schools surveyed in 1957 and 1961 revealed that a mean of 1.7 students had to be admitted to result in 1 enrollment. The corresponding mean for the 20 colleges was 1.5 for the 2–years, 1956 and 1957. The 1962 report stated that "Of all the ratios, this one has changed least since 1957."[2]

Information on the number of applications filed per applicant was obtained from a 40 percent sample of the no-shows. The mean number of applications filed per no-show applicant was 3.28 in 1956 and 3.21 in 1957. No-shows at publicly controlled institutions filed a median of 2.93 applications in 1956 and 2.94 in 1957; at privately controlled institutions the medians were 4.11 in 1956 and 4.07 in 1957. The mean number of applications filed by no-shows in the 20 institutions for the 2 years was 3.24.

The 20-college study did not attempt to uncover factors which determined the number of applications filed by each student. Massachusetts Institute of Technology noted that multiple applications are often stimulated by "... a high degree of uncertainty on the part of the student as to his chances for admission to a college." Whatever the causes, they are probably multiple. Desire and determination of the student and/or his parents, and/or his high school counselor, and/or a college recruiter may influence the number of applications a student files. The "closing-college-door" emphasis in the general publicity on college admissions may aggravate insecurity and uncertainty. Some students apply to prestige institutions with no intention of enrolling but merely to acquire the status symbol which admission would confer. These same students also apply to one or more "insurance" institutions in addition to the institution of their first choice.

Faced with the multiple applications problem, can the gambling ad-

[1] Ann K. Pasanella. *A Report on a Survey of Admission Statistics, 1957 and 1961.* College Entrance Examination Board, 475 Riverside Drive, New York, N.Y. September 1962. p. 1-2.
[2] *Ibid.*, p. 2.

missions officers reasonably predict their successes? In the 20 institutions, a high degree of consistency in rank order of percent of applicants admitted, of admittants registered, and of applicants registered in the two years is apparent (table 2). This consistency suggests that an individual institution should be able to make a reasonable estimate of the size of its freshman class. Later studies, although based on averages for several institutions, show similar consistencies. The 1962 report of the College Entrance Examination Board survey of colleges in 1957 and 1961 stated that the freshman enrollment generally turned out as the admissions offices expected. Since the "Expectation Ratio" consisted of averages, what may have been serious cases of over- or under-enrollment for some specific colleges could not be identified.[3] In 1963, the University of the State of New York reported application, admission, and registration figures from the institutions of higher education in the State for the 1958 through 1962 period; again, the notable characteristic of the figures, for public and for private institutions, was stability from year to year.[4]

At the bottom of table 2 are comparisons of the experience of multipurpose universities with those of primarily single-purpose institutions, such as teachers colleges and technological institutes. The single-purpose institutions, under both types of control and in both years, had a higher admission rate and a higher percentage yield of registrations from their applications than did the multipurpose universities. In both years the private single-purpose institutions had a lower registration rate than did the private multipurpose institutions, but the public single-purpose universities had a higher registration rate than did the public multipurpose institutions.

In both 1956 and 1957 the correlation between the percentage of applicants admitted and the percentage of admittants registered was too low to support the hypothesis that the more selective the institution (as represented by percent of applicants admitted), the lower the percentage of no-shows. In fact, Pratt Institute decided, on the basis of its 1956 cancellations, to accept more students in 1957 because the cancellation rate would yield approximately the same number of actual registrants. But many factors operate in determining the effects of less or more selective admissions policies. Grinnell College offered a cogent summarization of the effect of a selective admissions policy: "The policy of selective admissions brings about an increase in rejections where there is an increase in applications, provided the rate of yield does not seem to be affected by internal factors, e.g., advance tuition deposit, but rather by external changes such as the kinds of schools with which we are competing or may compete, the number of schools to which applicants are applying, and other external variables."

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[3] *Ibid.*, p. 3.

[4] See *College Admissions and Places for Freshman Students in New York State — A Statistical Study, 1958-1962.* The University of the State of New York, The State Education Department, Albany, N.Y., May 1963.

TABLE 2. — *Percent of applicants admitted and registered in individual institutions, by control and by multipurpose and single-purpose institutions: Fall 1956 and 1957*

Institutions by control	Percent of applicants admitted		Percent of admittants registered		Percent of applicants registered	
	1956	1957	1956	1957	1956	1957
Total	61.1	63.5	71.4	68.5	43.6	43.5
Public	74.6	76.8	73.6	68.4	54.9	52.6
Private	44.3	45.3	66.8	68.8	29.6	31.2
Public:						
A	97.8	94.6	84.0	79.0	82.2	74.8
B	93.8	93.1	88.2	82.6	82.7	76.9
C	90.8	90.1	76.2	75.0	69.1	67.5
D	86.7	81.2	82.4	75.7	71.5	61.4
E	83.4	72.6	77.0	72.2	64.3	52.4
F	82.8	80.9	70.0	70.0	57.9	56.6
G	77.8	72.4	64.1	56.5	49.9	40.9
H	72.3	77.5	70.1	58.5	50.7	45.3
I	61.6	73.4	67.3	60.4	41.4	44.3
J	51.1	49.9	77.2	78.9	39.5	39.4
Private:						
K	92.0	89.5	74.3	88.8	68.3	79.5
L	90.9	86.1	61.5	58.8	55.9	50.6
M	71.2	67.2	62.7	58.3	44.6	39.2
N	66.1	65.5	61.8	77.5	40.9	50.8
O	56.2	53.3	70.9	74.5	39.9	39.7
P	53.8	55.8	46.9	48.3	25.2	26.9
Q	51.1	45.6	66.8	55.2	34.1	25.2
R	44.9	48.7	50.9	58.2	22.9	28.3
S	41.2	42.8	51.0	47.9	21.0	20.5
T	25.4	27.5	96.2	95.8	24.5	26.3
Universities:						
Public	73.6	78.7	71.7	66.0	52.8	51.9
Private	38.5	39.5	70.8	76.0	27.2	30.0
Single purpose institutions:						
Public	90.4	87.4	78.6	75.2	71.1	65.7
Private	54.7	55.7	59.8	62.4	32.7	34.8

Nonrefundable application fees

No-shows were asked to state the amounts they paid in nonrefundable application fees on the assumption that the amount might be related to the number of applications filed. Some confusion was apparent in the

responses. For example, 22 percent of the respondents who were no-shows at institutions that required the fees reported that they made no payments; some students who applied only to Indiana University which requires no fee stated they had paid one. Whatever the reasons for the apparent confusion — inadequacies of the inquiry form, carelessness on the part of the respondents, or complete detachment from such sordid details as costs — any interpretation has a limited validity.

Over the 2-year period, 63 percent of the no-shows reported that they had paid 1 or more nonrefundable application fees — 43 percent of those who were no-shows at publicly controlled institutions and 91 percent at privately controlled institutions — and the median points on the distributions of amounts paid (by those who paid some amount) were $23.45 by 2,584; $22.50 by 1,018 in publicly, and $24.10 by 1,566 in privately controlled institutions. The corresponding medians for all responding no-shows, including the 37 percent who said they paid no application fees, were $12.15, nothing, and $21.85. Although the differences between medians are not great, there is evidence of a considerable shift of the modal application fee in an upward direction, as shown in the change from 1956 to 1957 in the percentages in the $10–$19 and $20–$34 intervals (table 3). Two factors, operating independently or in combination, could account for the shifts: (1) the increase in the number of applications filed per student and (2) the increase in the amount of the nonrefundable application fees charged by institutions.

TABLE 3. — *Percent distribution of amounts paid by no-shows in nonrefundable application fees, by control: Fall 1956 and 1957*

Amount paid	Total		Public		Private	
	Fall, 1956	Fall, 1957	Fall, 1956	Fall, 1957	Fall, 1956	Fall, 1957
No payment	38.9	34.6	60.2	53.8	13.2	2.7
$ 1–$ 9	8.3	10.6	5.0	8.2	12.2	14.5
10– 19	18.5	16.0	13.7	11.3	24.3	23.9
20– 34	20.1	21.9	12.9	15.4	28.8	32.5
35– 44	5.3	5.5	3.4	2.8	7.6	10.1
45– 54	4.0	5.5	2.5	4.8	5.8	6.7
55– 74	2.7	3.1	1.1	1.6	4.6	5.7
75– 99	1.0	1.3	.5	.6	1.6	2.5
100– 149	.8	1.2	.3	1.1	1.4	1.3
150–	.4	.3	.3	.4	.5	.1
Total number	2,260	1,839	1,232	1,148	1,028	691
Median amount paid by those paying	$22.80	$24.15	$21.40	$23.55	$23.60	$24.70

Students who were no-shows of the five institutions which charged no application fee tended to apply, if to any other institutions, to those which did not charge fees; 1,187, or 64 percent, reported they paid none to any institution. On the other hand, 80 percent of the no-shows at institutions which charged fees applied to other institutions which also required fees; the median amount paid by these students was $23.00. No-shows at the former institutions filed a mean of 2.43 applications each; at the latter, 3.50. The mean number of applications filed by no-shows for the institution requiring the highest application fee was 4.00. These averages do not indicate that application fees tend to reduce the number of applications filed per applicant.

Chapter 3

Admitted Applicants Who Failed To Register (No-Shows)

Regardless of the pressures from students, parents, alumni, legislators, and friends on behalf of applicants for admission, colleges are still in the business of recruiting able students. The competition is keen, and the colleges suffer their first defeat when the coveted students fail to apply. Wounds of battle are again inflicted when an admitted applicant fails to register. Some defeats at this point are inevitable for each college because the typical admitted applicant has also been admitted to one other institution. No institution has attained the battle strength to overcome even 1 to 1 odds in every skirmish.

Moreover, not only are colleges losing admitted applicants to other institutions, they are also losing students who fail to enroll in any institution. In terms of maximum manpower utilization, it is this group that is of greatest national concern. Of slightly more than 7,000 no-shows in the 20 colleges, 14 percent of those reporting indicated that they had not enrolled in any institution. Any loss of human potential should be a stimulus to the colleges to investigate the reasons for the students' failure to enroll, their plans for future enrollment, and the measures needed to encourage enrollment.

Reasons given by no-shows for enrolling in other institutions

The survey form (see Appendix B) requested each student to indicate the three most influential reasons for his enrollment in a particular institution. He could choose from a list of nine suggested reasons — A through I in table 4. Additional write-in reasons, which were encouraged, were standardized, the most frequently mentioned are designated J., K., and L. In a separate write-in item the no-shows were also asked, "What *one* factor do you think was most important in determining the institution you entered?" The responses closely paralleled the wording of the reasons listed in the form and so were coded accordingly.

High scholastic standing

By every available method of comparison among the 12 reasons, "high scholastic standing" ranked first. More than one-fourth (27 percent) of 4,542 respondents — 25 percent in publicly and 32 percent in privately

TABLE 4. — *Percent distributions of reasons given by no-shows for enrolling in another institution, by control: Fall 1956 and 1957 combined.*

Reasons	Rank order and percent checking reason as 1 of 3 most important						Rank order and percent giving reason as 1 most important					
	Total		Public		Private		Total		Public		Private	
	Rank order	Percent	Rank order	Percent	Rank order	Percent	Rank order	Percent	Rank order	Percent	Rank order	Percent
A. Commuting convenience	4	23.7	3	24.5	5	22.3	5	5.9	6	7.1	6	3.8
B. Scholarship assistance	2	26.3	4	22.8	2	32.5	3	13.8	3	12.5	3	16.3
C. Scholastic standing	1	65.7	1	61.4	1	73.4	1	27.3	1	24.9	1	31.8
D. Friends going	9	12.1	9	12.7	9	11.0	11	1.8	10	1.3	11	1.1
E. Parents' wishes	5.5	20.1	5	21.4	8	17.7	9	2.6	9	2.8	8	2.1
F. Less expensive	3	25.1	2	25.8	3	24.0	4	12.2	4	12.3	4	12.2
G. Good athletic record	12	4.6	12	4.2	12	5.2	12	.3	12	.4	12	.....
H. Student activities	5.5	20.1	6	18.6	4	22.8	8	2.8	8	3.7	10	1.3
I. Campus features	7	18.7	7	17.1	6	21.4	10	1.5	11	1.2	7	2.2
J. Curriculum	8	13.9	10	11.0	7	19.1	2	15.0	2	13.8	2	17.2
K. Location	11	6.6	11	5.0	10	9.4	7	3.9	7	3.8	5	4.0
L. Size	10	10.2	8	12.8	11	5.4	6	5.5	5	7.5	9	1.6
Other	.....	13.5	.....	17.5	.....	6.2	.....	7.9	.....	8.7	.....	6.4
Number of respondents	.....	4,911	.....	3,161	.....	1,750	.....	4,542	.....	2,944	.....	1,598
Number of mentions	.....	12,789	.....	8,053	.....	4,736	.....	.....	.....	.....	.....	.....
Mean number of mentions	.....	2.6	.....	2.5	.....	2.7	.....	.....	.....	.....	.....	.....

controlled institutions — checked this item as the one most important reason for choosing a school. Two-thirds of 4,911 students responding (66 percent) gave this as one of their three reasons.

When, however, three reasons which could be called "financial" — proximity to home, financial assistance in the form of scholarships and lower cost — were combined, this complex outranked the "high scholastic standing" factor in 7 of 10 publicly controlled institutions and in 7 of 8 privately controlled institutions for which reports were available. Of the no-shows 32 percent mentioned as most important one of the three reasons which had financial implications, as compared with 27 percent who mentioned high scholastic standing as most important.

Colleges in the 20–college study viewed with some skepticism the appropriateness of "high scholastic standing" as a factor in certain choices of an institution. The institutions, however, were not dismayed by the popularity of this item. As Georgetown University wrote, "Georgetown has sufficient confidence in the efficacy of her efforts to reject the implied odium as not arising from an informed judgment." Other institutions expressed similar self-confidence.

A combination of several of the figures possibly indicates that the majority of students tend to rate the scholastic standing of the privately controlled institutions above that of the publicly controlled: Eighty percent of the no-shows of private institutions and 57 percent of the no-shows of public institutions enrolled in private institutions (table 5), and "high scholastic standing" ranked first as the one most important reason for going to another institution (table 4).

Prestige may be associated with high scholastic standing in the minds of freshmen students. Temple University concluded from its findings that "... high scholastic standing seems to be equated with high social standing." The reports of both the private and the public schools stressed the pulling power of prestige. As some indication of the characteristics of the "institutional image," Massachusetts Institute of Technology reported that over a 10–year period, 6 colleges consistently had drawn about 50 percent of M.I.T. nonacceptors — among them Harvard, Yale, and Princeton. M.I.T. has this to say about the situation: "That these three institutions, each with an atmosphere and a curricular emphasis differing from those at M.I.T., also draw heavily from M.I.T. applicants, indicates that these differences are less in the eyes of students than might be expected."

An unorthodox but intriguing experiment in prestige identification (in which no mirrors were used) is reported here as described in the Colgate report:

"We performed a rather simple experiment to determine what factors caused a boy to select a college other than Colgate. We took the questionnaires which the boys had returned and looked only at the list of colleges to which an individual boy had been admitted. Without any previous examination of the data, a member of the Colgate faculty guessed which college the boy had chosen. The only information supplied to this person was that the boy could choose from the listed colleges and that he

TABLE 5. — *Percent distribution of no-shows by location, type, and control of institutions in which enrolled: 1956-57 and 1957-58*

Reporting institutions by year and control	Number enrolled no-shows	Percent enrolled in institutions							
		In same State				In different State			
		Of same type		Of different type		Of same type		Of different type	
		Same control	Diff. control	Same control	Diff. control	Same control	Diff. control	Same control	Diff. control
1956-58:									
Total	5,418	8.9	4.8	14.5	11.4	18.0	10.6	18.5	13.3
Public	2,794	8.8	8.1	11.9	16.6	15.4	16.5	5.2	17.4
Private	2,624	9.0	1.4	17.3	5.9	20.7	4.3	32.6	8.8
1956-57:									
Total	2,416	15.8	6.2	11.9	11.1	20.4	11.2	10.2	13.1
Public	1,387	12.6	7.2	12.6	15.7	15.1	15.4	5.6	15.8
Private	1,029	20.2	5.1	11.0	4.9	27.5	5.4	16.5	9.4
1957-58:									
Total	3,002	10.9	5.2	9.1	10.2	19.7	11.2	21.4	12.3
Public	1,407	5.1	9.0	11.2	17.6	15.7	17.6	4.8	19.0
Private	1,595	16.0	1.9	7.2	3.7	23.2	5.6	36.1	6.3

had been admitted to Colgate but had gone somewhere else. Our examiner could correctly identify the college selected in about 75 percent of the cases. Often he was required to select from as many as four or five choices. The results of this modest experiment will come as no surprise to those already familiar with the hierarchy of status among eastern liberal arts colleges. These colleges seem to fall into a fairly definite pattern with respect to prestige in the minds of students, guidance counselors, and others who advise students. All things being equal, a boy would select the highest prestige college to which he was admitted in this hierarchy. It seems reasonable to conclude that the position a college is reputed to have in this hierarchy is a highly significant factor in the selection of a college."

However, this artless reason for selecting a college may unfortunately be a counterweight to efforts to raise retention rates. The importance of matching student and institution is emerging from various studies of nature plus nurture-in-the-college-setting. In 1964, Constance Waller stated the fallacy of choice by prestige: "If a college is selected by a student and/or his family on the basis of reputation only, the student may be applying to a college that is wrong for him."[1]

Whether or not the chosen institution actually merits a fine scholastic reputation or has instead been elevated by student imagination is perhaps beside the point. "High scholastic standing" is a *desideratum*. The Pennsylvania State University found a solution to the problem of the validity of student responses: "It is difficult to assign a realism value to students' reasons for selecting an institution, for when the reason is stated, it is real to the student."

Curricular offerings

Ranking second to "high scholastic standing" as the *one* most important reason for enrolling in another institution was a write-in item relating to curricular offerings, variously stated as "courses I wanted," "program of instruction," and "specialized in ————." Fifteen percent of all no-shows, 17 percent from privately controlled and 14 percent from publicly controlled institutions, mentioned this as a decisive factor in their selection of a college. This item ranked eighth in percentage of checks as one of the 3 most important reasons; interestingly, 684 of 4,911 no-shows included this item among the 3 most important, and 683 of 4,542 reported it as the *one* most important reason. Since so many students volunteered this response, educators could reasonably assume that students would appreciate better pre-college counseling and clearer statements of institutional programs. Awareness of prospective students' cognizance of course offerings prompted Charles Elton and Lewis Donohew of the University of Kentucky to question in 1963 the accuracy of course and program descriptions presented in college catalogues."[2]

[1] Constance Waller. "Research Related To College Persistence." *College and University*, Vol. 39, No. 3, pp. 281–294, Spring 1964.

[2] Charles F. Elton and Lewis Donohew. "The College Catalogue: Some Preliminary Research." *College and University*, Vol. 39, No. 1, Fall 1963, pp. 36–43.

Financial assistance from colleges and other sources

Scholarship assistance ranked third as the *one* most important reason to no-shows for choice of institution and second in total percentage of mentions accorded to the three most important reasons. In publicly controlled institutions 22 percent of no-shows and in privately controlled institutions 29 percent of no-shows received scholarship assistance (table 27). These figures check rather closely with the percentages in table 4 which show that 23 percent of the no-shows in public and 33 percent in private institutions who enrolled elsewhere mentioned scholarship assistance as one of the 3 most important reasons for enrolling.

The institutions hardest hit by the competition of institutional financial assistance were Georgia Institute of Technology, with 30 percent of its no-shows receiving a median of $1,197; Cornell University, with 21 percent receiving $950; Colgate University, with 51 percent receiving $948; and Georgetown University, with 28 percent receiving $718 in financial assistance from the institutions in which they enrolled. It was noted by Cornell and Georgia Tech that median amounts of $1,000 were received by 16 and 8 percent, respectively, from other sources. Comparison of the estimated family income figures for these 4 institutions in table 21, p. 52 shows that the attraction of financial aid was not limited to students from families in the lower-income brackets. Nor is it probable that the institution which was the successful bidder could, in every case, establish the fact that its higher scholastic standing was the main attraction.

The winning attractions are difficult to identify. The successful bidders cannot, in every case, attribute their victories to higher scholastic standing. Neither can an offer of aid, by itself, assure a college of an enrollee — although its puts the school in a good fighting position. The 1962 College Entrance Examination Board Survey of Admission Statistics for 1957 and 1961,[3] shows that a college can feel more, but only a little more, confident about enrolling an accepted aid applicant than an accepted applicant in general. In 1961, with financial aid, the average "fall-out ratio" (admitted student per enrolled freshman) was 1.47 whereas for the total enrolled freshman group it was 1.70; the figures for 1957 were almost identical. Furthermore, an aid applicant will enroll without aid: "In 1961, one out of every 2.39 aid applicants accepted for admission but denied aid registered at the college without aid."[4]

Distribution of no-shows in other institutions

Do students who file two or more applications tend to apply to schools that are similar? No. The composite picture shows guerrilla warfare. Not all the attacks are charted, for table 5 compares only the participating institutions of which the student was a no-show and the school in which he enrolled, not all to which he applied; the comparative descriptions

[3] Ann K. Pasanella, *A Report on a Survey of Admission Statistics, 1957 and 1961.* College Entrance Examination Board, 475 Riverside Drive, New York, N.Y. September 1962.

[4] *Ibid,* p. 6.

are three — location, type, and control. Nevertheless, the description is sufficient to show the diversity. In 1956-57, 16 percent of the no-shows enrolled in institutions in the same State, of the same type, and under the same control; 13 percent, in institutions different in all three respects. The corresponding percentages for 1957–58 were 11 and 12. The tendency to enroll in institutions different, in terms of State, type, and control, from the reporting institution to which they had been admitted was more pronounced on the part of no-shows of public than of private institutions.

The majority of no-shows enrolled in private institutions — 83 percent from private and 63 percent from public. The majority enrolled in institutions in another State — 71 percent from private and 57 percent from public. More than half (52 percent) of all the no-shows enrolled in institutions of a different type (university, liberal arts, teachers college, technological school). Lack of commitment to "type" may indicate, in many cases, undefined educational objectives.

The moderate tendency for 1956–57 no-shows to enroll in institutions in other States became more pronounced in 1957–58. The percentage of no-shows of privately controlled institutions who enrolled in private institutions in other States was significantly higher in 1957–58 than in 1956–57 (59 v. 44 percent) and also higher than the percentages of no-shows in public institutions who enrolled in out-of-State public institutions in those years (21 percent). One-fourth of the no-shows in publicly controlled institutions enrolled in another publicly controlled institution in the same State in 1956–57, but only one-sixth made the same shift in 1957–58. In 1956–57 slightly more than one-fifth of the no-shows in the publicly controlled institutions enrolled in another institution in the same State but under private control, and more than one-fourth did so in 1957–58. The rise of enrollments among no-shows in institutions in other States from 55 percent in 1956–57 to 65 percent in 1957–58 may not mark a trend but does suggest an interesting avenue for further analysis, particularly since the percentage for privately controlled institutions went up so sharply — 59 to 71.

Any further analysis, however, should take into account the numbers of out-of-State admittants who may actually enroll in institutions in their own States. The total immigration pattern for the States involved in the 20–college study has remained stable.

The American Association of Collegiate Registrars Study shows that out-of-State migration in the fall of 1958 was 22 percent in the 13 States and the District of Columbia where the 20 institutions are located.[5] In the fall of 1963, the total out-migration of students from these States and the District of Columbia was approximately 21 percent.[6] Since about 60 per-

[5] Nelson M. Parkhurst, Coordinator. *Home State and Migration of American College Students Fall 1958*, Committee on Research and Service, American Association of Collegiate Registrars and Admissions Officers, March 1959.

[6] Edith M. Huddleston and Joan E. Reinthaler. *Residence and Migration of College Students, Fall 1963*. Preliminary Report, U.S. Department of Health, Education, and Welfare, Office of Education (in cooperation with the American Association of Collegiate Registrars and Admissions Officers) April 15, 1964.

cent of no-shows went to an institution in a State other than that of the reporting institutions it is probable that in many cases the other State was the State of residence of the no-show.

Because of its summary nature, table 5 obscures the no-show migration patterns peculiar to individual colleges. The records of students who were admitted to Indiana University but who enrolled elsewhere illustrate changes that occur from one year to the next in a large publicly controlled, multi-purpose institution located at a distance from any large metropolitan area. In 1956–57, privately controlled institutions enrolled 46 percent of Indiana University's 352 enrolled no-shows. In 1957–58 the percentage was 57. In 1956–57, the percentage of no-shows accepted by Indiana University but enrolling in institutions outside the State was 63 and in 1957–58 it was 69. The percentage enrolling in the same type of institution dropped from 60 percent in 1956–57 to 54 percent in 1957–58. The percentage of no-shows who went to private institutions of a different type outside Indiana was 12 in 1956–57 and 21 in 1957-58.

Pratt Institute no-shows who enrolled elsewhere provide a contrasting picture, due perhaps to rapidly expanding comparable programs on several campuses of the State University of New York. This privately controlled institution with an enrollment of slightly under 5,000 is located in a large metropolitan area, and places great emphasis on engineering and applied arts. Of Pratt's 160 no-shows who enrolled in other institutions in 1956–57, 40 percent went to publicly controlled institutions. In 1957–58, 42 percent of 212 enrolled no-shows went to publicly controlled institutions. Only 25 percent of the 1956–57 no-shows at Pratt Institute enrolled in institutions outside of New York State, and in 1957–58 this percentage went down to 19. The percentage of no-shows enrolling in the same type of institution remained practically the same for the two years — 64 and 65. The percentage who went to public institutions of a different type, outside of New York State, was 4 in 1956–57 and 2 in 1957–58.

Nevertheless, these figures (table 5) indicate that a considerable number of students enrolled in institutions which are decidedly different (as measured by the three criteria: State, type, and control) from the institution at which they became no-shows. The inference from these figures may be that to students considerations of location, type, and control are less important than a reputation for high scholastic standing and an opportunity to receive scholarship assistance.

No-shows who did not enroll in any institution

The story of student progression has essentially ignored high school graduates who do not continue their formal education. This is so, in part at least, because there has been no agency or institution uniquely qualified by interest and resources to take the responsibility for assembling and disseminating comprehensive information on this group of young people. This study has established a small beginning by obtaining data on a sample of high school graduates who applied for admission and who were

qualified for admission to at least one college or university, but did not enroll in any institution up to a year after admission. The lost battalion numbered 952, or one-seventh of the total group of no-shows in the fall of 1956 and 1957.

Because one of the principal objectives of the study was to obtain as definitive an answer as possible to the question, "What is the relative importance of inadequate financial resources as a deterrent to college attendance?", the discussion in this section will deal primarily with the reasons given by these admitted students for their failure to enroll.

Ratings of reasons were obtained from 884 applicants who had been admitted to 10 publicly controlled and 7 privately controlled institutions and had not enrolled in these or any other colleges or universities. The rating form (appendix B) listed seven of the reasons shown in table 6 (A–G). The individuals were asked to check the three most important reasons and to write in reasons if they so chose. They were also asked in a completion item to give the one most important reason for failure to enroll. Except for those stricken by marriage on the way to college (item H, which has been added to the seven originally listed), the students gave reasons which were generally rewordings of the seven in the check-list.

The top-ranking reason for failure to enroll in any college, (B) "I could not afford to attend any of the institutions to which I was admitted," combined with the second-ranking reason, (E) "I took a full-time job" (which also has overtones of financial need), influenced about 3 of 5 who did not enroll. Reason G, "I was needed at home," which ranked fourth in mentions as "most important," undoubtedly has some financial implications. There is an apparent inconsistency between the percentages in the public and private columns for items B and G: the differences in percentages are statistically reliable for item G but not for item B. Item G, in fact, is the only one for which the differences in percentages between no-shows in publicly and in privately controlled institutions were large enough to be significant at the 1 percent level. Commenting on item G, Berea College had this to say: "About a third in both years said they were needed at home. Most of our students come from rural areas and to be needed at home means that many of them are needed on the farm and for other family work."

Although it was a write-in response, marriage or situations involving marriage ranked third among the most important single reasons. Marriage was clearly a much more important deterrent to college attendance for girls than it was for boys, as indicated by the difference in relative frequency of mention between no-shows in colleges attended in larger proportions by women and those in colleges attended predominantly by men. For example, 5 of the 13 women who were admitted to Mary Washington College but did not enroll anywhere mentioned marriage as a reason, and 3 of 6 who wrote in a "most important" reason gave marriage. On the other hand, of 15 nonenrollees who had been admitted to Georgia Insti-

TABLE 6. — *Percent distribution of reasons given by no-shows for not enrolling in any college, by control of reporting institution: 1956-57 and 1957-58 combined*

Reasons for failure to enroll	Percent giving reason as 1 most important			Percent checking as 1 of the 3 most important reasons		
	Total	Public	Private	Total	Public	Private
A. I was not admitted to school of my first choice	0.9	0.8	1.3	4.8	4.9	4.4
B. I could not afford to attend any of the institutions to which I was admitted	44.5	45.5	40.4	31.0	31.6	28.3
C. I was drafted for military service	0.5	.6	.....	2.1	2.6	.....
D. I enlisted for military service	8.3	8.3	7.9	9.2	10.1	5.4
E. I took a full-time job	12.8	13.9	7.9	26.2	26.3	25.6
F. I became ill	4.6	4.5	5.3	2.6	2.4	3.7
G. I was needed at home	8.1	6.9	13.2	10.3	9.1	15.2
H. Marriage	11.2	11.5	9.9	7.3	7.2	7.7
Other	9.0	7.9	13.9	6.5	5.8	9.8
Total number of respondents	775	624	151	884	704	180
Total number of mentions	.....	.....	.....	1,512	1,215	297
Mean number of mentions	.....	.....	.....	1.7	1.7	1.7

NOTE: The underlined percentages are significantly higher than the corresponding percentages for institutions under public control.

tute of Technology, none mentioned marriage as a reason for failure to enroll.

Eastern Michigan University checked the rank in high school graduating class for the no-shows who had given up college for marriage and reported as follows: "No immediate answer is available as to why it is so, but marriage claimed 22 percent of the upper half that did not enroll in any institution while no individuals listed this as the major determining factor in the lower half." The marriage paradox which puzzled Eastern Michigan and which Cornell University discovered in studying its female dropouts suggests an interesting hypothesis, "Smart girls choose marriage in preference to degrees." Cornell wrote of its high-achieving female dropouts, "Apparently, passing grades are a prerequisite for matrimony." This phenomenon suggests that educators might give more attention to the proposition that the trend toward earlier marriages necessitates modifications in the educational pattern for women to provide greater opportunities for the resumption of formal education after a period of absence from the classroom. Any measures which give promise of adding needed talent to the national pool of professional personnel should be examined.

Reasons C and D, concerning military service, are probably as predominant on the men's side of the loss column as marriage is on the women's side. How permanent these reasons are in preventing ultimate college attendance and graduation cannot be determined from the data. The ratio of the number of enlistments to the number drafted was nearly 17 to 1. The two groups represent 9 percent of the respondents.

Those who listed marriage or military service as the single most important reason for not going to college totaled 20 percent of the respondents. Table 7 shows that 78 percent of all nonenrolled no-shows were still interested in enrolling; therefore, unless practically all of those who gave other than marriage or military service as the reason for not enrolling did actually enroll, then some of those who gave these two reasons were planning to enroll later.

Failure to be admitted by the first choice school rated very low as an important reason for not enrolling in college. Similarly, illness took a toll of less than 5 percent.

Generally, the reasons given by the nonenrolled no-show samples in the publicly and privately controlled institutions were not significantly different. "I was needed at home" (G), was the sole reason which had a significantly higher percentage reported by the institutions under private control. Furthermore, the rank order of most important reasons correlated .73 between publicly and privately controlled institutions, and the rank order of percent of mentions, .97. The rank order coefficient between percentage of most important reasons and percentage of mentions was .83. These coefficients are high enough to justify the conclusion that inferences by either of the 2 methods of analysis will be approximately the same.

Interest of nonenrolled no-shows in entering college at a later time

The ratio of those expressing interest in enrolling later to those reporting no interest was above 3.5 to 1 among no-shows in both publicly and privately controlled institutions (table 7). The percentage of those interested in enrolling who would enroll in the reporting institutions was 55, or 59 for publicly and 39 for privately controlled institutions, suggesting that the former had better chances of ultimately enrolling their no-shows than did the latter. More than three-fourths of the nonenrolled no-shows who expressed an interest in eventually enrolling named an institution different in type from that of the reporting institution. They were about equally divided on the issues of State and control.

TABLE 7. — *(A) Interests of 1956-57 and 1957-58 nonenrolled no-shows in entering college at a later date and (B) characteristics of institution selected in relation to reporting institutions, by control*

Item	Number and percent having several interests					
	Total		Public		Private	
	Number	Percent	Number	Percent	Number	Percent
A. Interest in enrolling						
In reporting institution	377	43.0	331	45.7	46	30.5
In some other specified institution	148	16.9	122	16.8	26	17.2
In an unspecified institution	160	18.3	113	15.6	47	31.1
Not interested in enrolling	191	21.8	159	21.9	32	21.2
Total reporting	876	100.0	725	100.0	151	100.0
B. Characteristics of institution[1]						
Same State	73	52.1	67	55.8	6	30.0
Different State	67	47.9	53	44.2	14	70.0
Same type	32	22.9	28	23.3	4	20.0
Different type	108	77.1	92	76.7	16	80.0
Same control	73	52.1	63	52.5	10	50.0
Different control	67	47.9	57	47.5	10	50.0
Total reporting	140	100.0	120	100.0	20	100.0

[1] Of 148 specifying an institution other than the reporting institution, 140 provided data on characteristics.

The relative importance of inadequate financial resources as a deterrent to college attendance among the sample of students who were admitted but did not enroll can be summarized by this statement: More than half of the no-shows who did not enroll in any college attributed the failure to do so to factors identified with insufficient economic resources. In fact, about two-thirds of all nonenrolled no-shows gave as their most important single reason one that was associated directly or indirectly with financial need.

Although the reference is not restricted to no-shows who did not enroll anywhere, Massachusetts Institute of Technology observed that, of 600 who failed to enroll at M.I.T. for financial reasons, 84 had made no scholarship application at M.I.T. and 36 more had cancelled their scholarship applications before any action was taken on them. "It is true that some may have felt the competition for scholarships to be too strong, but it appears more likely that these students selected the more or less tactful course of giving finances as a reason, rather than a blunt, 'I just did not want to go to M.I.T.' If this behavior is common, it would appear that financial reasons have been inflated by merely asking the student. The fact remains, however, that a large number of nonacceptors did have financial problems."

Several participating institutions concurred in the belief that the "ghosts" who failed to materialize on any campus because of insufficient resources would, as indicated by rank in high school and other factors, very probably have succeeded in a higher education program. That there is some loss of talent at the college threshold is undeniable; that much of the talent may fail of realization without further cultivation is a reflection of the values placed by us as citizens on our resources.

Chapter 4

Undergraduate Students Who Discontinued Attendance (Dropouts)

Another casualty in the academic struggle, in addition to the no-show, is the student who leaves college at some point prior to the completion of degree requirements. Sometimes this student is a casualty only in an accounting sense because he leaves when he has attained his goal. The goal may have been completion of a 2–year terminal program in automatic data processing, or, especially among girls, marriage or preparation for a position as a medical secretary. Another accounting casualty is the student who finds himself in the wrong institution for one or more of a number of reasons and transfers immediately or later to another institution. This experience may result in a loss of self-esteem, time, and money, each of which is an element in a casualty evaluation, but the student is not a dropout from higher education.

The progress and welfare of this country will inevitably be adversely affected by the failure of able students to continue their education to levels commensurate with their capacities. Before the college community can initiate action to reduce college dropouts, better understanding of the circumstances attending discontinuance is needed. Attempts to determine what factors cause dropout and to ascertain their relative influence depend, for the most part, on statements of students describing or explaining their overt behavior. These statements are often disquietingly suspected of masking other, more covert reasons for leaving school. It is undoubtedly true that many deterrents to continuing education might be overcome if that vague complex of forces called "motivation" were only at fuller tide. It is also true that many deterrents can be removed simply by accepting at face value the reasons given as causes without submitting them to deeper analysis.

The general status of the dropouts, their reasons for withdrawing, and their plans for continuing formal education are set forth in this chapter. Among the active students (those who were still attending the 20 colleges at the time of the survey), there were potential dropouts. To round out the actual and incipient withdrawal picture, the reenrollment plans of active students and the factors influencing their plans are also described.

Reasons for dropout

All or a sample of the dropouts from the four undergraduate classes in the 20 institutions were asked to respond in writing to the following three

items: (1) What is your one most important reason for dropping out of college? (2) List, in order of importance to you, the other factors that caused you to drop out. (3) Under what circumstances would you have continued as a student?

The participating institutions agreed upon a uniform system of coding the responses. The coding plan appears in table 8, which reports in detail the relative frequency of mention of the *one* most important reason for dropping out of college. Table 9 summarizes the responses to the three items — the one most important reason, the contributing factors, and the statements of circumstances under which the students would have continued in attendance.

Nearly 2,400 dropouts named a *one* most important reason for discontinuance, and a total of 2,206 mentions of additional factors were listed. Listed were nearly 1,700 mentions of changed circumstances which would have influenced students' decisions to remain in college. Academic reasons had the highest frequency in all three categories of reasons. Health and family reasons generally ranked second and financial reasons ranked third.

Academic

When the "most important" reasons for dropout were grouped according to the seven categories shown in table 8, academic problems headed the list. According to the responses, these problems caused nearly 60 percent of the more than 1,000 dropouts from privately controlled institutions and about 36 percent of the 1,350 dropouts from publicly controlled institutions. Within the academic category, poor grades were responsible for more than one-third of the dropouts from the privately controlled institutions. In the publicly controlled institutions, on the other hand, only one of eight dropouts specifically mentioned poor grades as the one most important reason for withdrawal. The 3 : 1 ratio (36.5 to 12.1) for this factor far exceeded any other ratio between percentages of importance to the two groups.

In fact, the academic category is the only category in which the percentages of dropouts from privately controlled institutions are significantly higher than the percentages of dropouts from publicly controlled institutions in either the "one most important" or the "changed circumstances" columns in table 9. This same significant difference between public and private institutions appears in the analysis of college experiences (ch. 7) in response to the statement, "My grades were too low."

It is pertinent at this point to examine the concept that, in highly selective institutions, where presumably every student is capable of good academic performance, "poor grades" may be an artificial reason produced by an established practice of marking on the curve. Table 8 indicates that there are differences either in the quality of students or in the grading standards. It may also indicate that institutions which have high admission standards have even higher grading standards.

Thus, an implied method of preventing attrition due to poor grades is

TABLE 8. — *Percent of dropouts listing each item as the one most important reason for withdrawal, by control of institution which they left: 1956-57*

One most important reason for dropping out of college	Percent giving reason		
	Total	Public	Private
Academic — total	45.8	35.8	58.7
Poor grades	22.8	12.1	36.5
Not interested in courses or desire for special field of study	7.7	8.1	7.1
Lack of or change in vocational objective	4.8	5.7	3.6
Inadequate high school preparation	.4	.4	.3
Other academic	10.1	9.5	11.2
Health and family — total	25.2	29.8	19.4
To get married	7.3	9.1	5.1
Sickness of self and/or family	7.3	7.1	7.6
To have baby	1.8	2.5	.9
To be with husband	1.6	1.9	1.1
Personal injury and/or exhaustion	1.3	1.6	.9
Other health and family	5.9	7.6	3.8
Financial — total	15.0	17.9	11.4
Lack of funds	6.7	7.7	5.4
Had to go back to work	1.3	1.7	.7
Other financial	7.0	8.5	5.3
Dissatisfactions — total	6.1	8.0	3.5
Size of institution	1.0	1.4	.4
Evening classes and difficulty in commuting	.3	.4	.1
Prefer coeducational institution	.1	.1	.1
Other dissatisfactions	4.7	6.1	2.9
Social and religious — total	2.3	1.9	2.9
Social life on campus	.9	.4	1.5
Religious	.1	.2	.....
Other social and religious	1.3	1.3	1.4
Disciplinary — total	.5	.5	.6
Other — total	5.1	6.1	3.5
Total number of responses	2,398	1,350	1,048

NOTE: The underlined percentages are significantly higher than the corresponding percentages for institutions under the opposite type of control.

TABLE 9. — *Percent distribution of dropouts naming the one most important reason for dropout in each category of reasons, percent of mentions of contributing reasons in each category, and percent of changed circumstances in each category, by control: 1956-57*

Category of reasons	Percent of dropouts naming reason as *one* most important			Percent of total mentions of other contributing reasons			Percent of total mentions of changed circumstances		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
Academic	45.8	35.8	58.7	40.5	38.7	42.7	40.0	34.6	49.5
Health and family	25.2	29.8	19.4	17.3	19.3	14.6	23.2	25.4	19.4
Financial	15.0	17.9	11.4	20.9	21.0	20.7	22.5	24.7	18.6
Dissatisfactions	6.1	8.0	3.5	12.3	13.5	10.8	5.3	6.1	3.9
Social and religious	2.3	1.9	2.9	2.2	0.0	5.0	2.2	1.8	2.8
Disciplinary	.5	.5	.6	.5	.2	.8	.2	.1	.3
Other	5.1	6.1	3.5	6.3	7.3	5.4	6.6	7.3	5.5
Total numbers	2,398	1,350	1,048	2,206	1,242	964	1,691	1,083	608

NOTE: The underlined percentages are significantly higher than the corresponding percentages for institutions under the other type of control.

to equalize admissions and grading standards — in these cases, by raising entrance requirements while maintaining performance standards. According to Dean Charles W. Stanford, as reported in a May 1964 *Chicago Tribune* article, the University of Illinois has found that academic difficulties and lack of interest have been reasons for dropout since the University's adoption of stricter admissions policies in 1961.[1]

However, according to a 1963 University of Deleware study,[2] simply to raise admission standards is to cater to "easily educable" students. These are the students who not only possess superior academic qualifications but also display value-orientations conducive to academic success.[3] The present concern of many educators and researchers is the psychological and sociological aspects of the attrition problem. In 1962, Summerskill stated that economic and administrative approaches to the problem have not explained the causes of attrition and have not significantly reduced dropout rates.[4] As a result of the 1963 analysis of the abilities, values, and achievement patterns of 334 seniors at the University of Delaware, Pemberton concluded that colleges should ascertain and set the minimum qualifications of educability but then concern themselves with levels and types of motivations; and the student motivations are becoming increasingly diversified as college populations and curriculums become more heterogeneous.[5]

Health and family

Health and family reasons ranked second to academic problems as the *one* most important reason for attrition in both public and private institutions, but these were more common among public than among private college dropouts. Situations attending marriage (to have baby, to be with husband) created demands which resulted in a significantly higher percentage of dropouts among women in the publicly controlled than in the privately controlled institutions. Among the "changed circumstances" (table 9), health and family factors also ranked second, but as a contributing cause of dropout this cluster of reasons ranked third. Unfortunately, data by sex were not available, and the numbers of students involved in the men's and women's colleges are too small for comparison.

Information from certain participating colleges which, in most cases, had more women than men in the responding population does furnish indirect evidence of the sex-relatedness of the health and family reasons, and specifically of the marriage element. Berea, where 60 percent of the item respondents were women, reported that "The most frequent reason given for dropout was in the area of health and family . . . As was expected,

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[1] Marilou Hedlund. "The College Dropout Often Isn't That; He Returns for a Degree." *Chicago Tribune*, May 1, 1964.

[2] W. A. Pemberton. *Ability, Values, and College Achievement*. University of Delaware Studies in Higher Education, No. 1, University of Delaware, Newark, 1963.

[3] *Ibid.*, pp. 53–68.

[4] John Summerskill. "Dropouts from College." in *The American College*, ed. by Nevitt Sanford. Ch. 19. New York: John Wiley & Sons, 1962, pp. 627–658.

[5] Pemberton, *op. cit.*, p. 53.

when the students were asked under what circumstances they would have continued . . . responses coincided with the most important reason — family responsibilities." The situation was similar at Maryland State Teachers College, Towson, which reported, "Of all the reasons given by students for failing to remain in college, marriage (or a cluster of reasons related to marriage . . .) was one appearing most frequently. This is in all probability a reflection of the fact that 75 percent of the students enrolled at Towson are women."

At Bowling Green State University, where the numbers of men and women in the sample were practically the same, "health and family" reasons were most frequently given. Bowling Green further reported that "The average grade of those in all categories except 'marriage' and 'miscellaneous' is well below that required to remain in the University in good standing." Cornell University also pointed out that, unlike men dropouts, who evidently leave primarily because of academic difficulties, the majority of women leave for other reasons. At Cornell, only 27 percent of the women dropouts had grades below 70, as compared with 71 percent of the men, and marriage, the most important reason given by women for leaving, was not mentioned by women with grades below 69.

The Pennsylvania State University noted that "Twice the number of women [dropouts] checked health and family problems (sickness of self was given most often) as checked academic problems." "In general," observed Penn State, "men believed that better grades would have influenced them to remain and women believed that if they hadn't been sick they would have remained." Health and family factors were also paramount at the University of Tennessee, which reported 36 percent of the losses attributable to these causes.

The marriage fallout reading was highest at Mary Washington College, the women's undergraduate college of the University of Virginia: "Regardless of the tenth in which a discontinuee finished in her high school class, marriage was the leading factor that caused dropout from college." In contrast, Georgia Institute of Technology, attended predominantly by men, reported only one dropout attributable to marriage, and Georgetown University, whose sample was exclusively male, reported, "Marriage presented no problems to any of the group."

Apparently these findings are consistent with the male and female stereotypes: Men are influenced in their decisions by money and marks, but the great determinant for women is still men.

Financial

Third in order of "most important" reasons for dropping out of college were those in the financial category. Fifteen percent of the dropouts rated financial factors as the most important reason for discontinuance and 21 percent listed them as contributing factors. A significantly higher percentage of dropouts from public institutions than from private cited financial problems among their reasons for leaving.

In terms of most important reasons for dropping out (table 8), there was a 3 : 1 ratio of total academic reasons to total financial reasons. The ratio was 2 : 1 in publicly controlled and 5 : 1 in privately controlled institutions despite the normally higher costs in the latter. When dropouts mentioned a second or third factor, it was more frequently one indicating financial difficulties (table 9), but when students named the changed circumstances which might have altered their decision to withdraw, academic difficulties returned to the forefront.

Overall, at least 46 out of 100 dropouts were having academic difficulties, and 23 out of 100 were facing financial problems. Whereas financial problems were preeminently influential in determining where or whether no-shows entered college (tables 4 and 6), they were not, in the aggregate, the principal causes of withdrawal. When the financial reasons given for dropout are compared with college experiences pertaining to finances (items E and G, "Statements for Dropouts," chapter 7), corroboration is plain.

Other

Reasons ranking fourth in frequency of mention, both as the one most important and as contributing, were those classified as "dissatisfactions." Twenty-three dropouts were dissatisfied with the size of the institution, 19 in publicly controlled and 4 in privately controlled institutions. This ratio indicates some correlation with the 7.5 (public) to 1.6 (private) ratio shown in table 4 for "size" as a most important reason given by no-shows for selecting an institution. These numbers indicate that size of institution is a relatively unimportant single factor in influencing either the enrollment or persistence of students. "Other" dissatisfactions not specifically named in table 8 accounted for 5 percent of the response and included size of classes, administrative rules and regulations, and the unspecified variety of dissatisfactions which the respondents called "general."

The three main categories of reasons for dropout covering the academic year 1956–57 — academic, health and family, and financial — were also the top reasons for discontinuance between 1950 and 1954 (as indicated by the *Retention and Withdrawal* study), but have an interesting difference in rank order. The indicated order of magnitude in the earlier study, based on weights for level of importance, was (1) financial, (2) academic, and (3) health and family. The indices of relative importance were .629, .500, and .275, respectively. Analysis of the ratings by sex showed that, for men, the financial index was .651; the academic, .618; and the health and family, .175. For women, the financial index was .684; the health and family, .402; and the academic, .363. Direct comparisons between the results of the 20–college study and those of the *Retention and Withdrawal* study are not possible, chiefly because of the difference in forms of response. The comparison does permit, nonetheless, some general impressions regarding the relative importance of discontinuance reasons

over a span of time. There is also the probability that status involvement may have influenced responses. In the earlier study student responses were sent directly to the Office of Education whereas in this study they were sent directly to the institution.

Rank-order correlations between nine pairs of ratings reflect the internal consistency among the dropouts' appraisals of their reasons for leaving college. When the "one most important reason" percentages were arrayed in rank order and compared with the similarly ranked "other factors causing dropout," the correlation coefficients were: total, .72; public, .78; private, .72. When the "one most important reason" ranks were compared with the "changed circumstances" ranks, the coefficients were: total, .92; public, .91; private, .92. And when the ranks of "other factors" were correlated with those of "changed circumstances," the coefficients were: total .79; public, .79; private, .79. Although, during the academic year 1956-57, 1,538 of 5,232 students, or 29 percent, dropped out of publicly controlled institutions, and 466 of 3,948 students, or only 12 percent, dropped out of privately controlled institutions, there seemed to be no pattern of causation that differentiated institutions by type of control. Institution-by-institution analyses showed that indices of relationship varied as much among institutions under the same control as between institutions under different control.

The following extracts from the reports of the 20 colleges reveal some of the human, and therefore diverse, values behind the statistics, and stand without comment.

Indiana University — "Of those that discontinue their education completely, 63 percent are women . . . statistically speaking their reasons do not appear to be academic for, as a group, they were adequately prepared for college since 89 percent graduated in the upper half of their high school class and, as a group, their college work was satisfactory since 76 percent made grade averages of 'C' or better.

"In order to evaluate properly the reasons given, by this group of 37 women, for discontinuing their education, correlations were run among: (1) The one most important reason for leaving, (2) Other factors causing 'dropouts,' and (3) What changed circumstances would have resulted in their continuing as students. A very high degree of correlation resulted. It was approximately 100 percent between item (1) and (3) above. For instance, one young lady gave as the one most important reason for leaving: 'to get married' and, in answer to what changed circumstances would have resulted in her staying, replied: 'Had I not found the right man so soon.' In addition, individual evaluations were made of the statements of the experiences at Indiana University, and without exception these statements supported the reason for dropout in each case.

"The complete evaluation and correlation of the thirty-seven questionnaires from women shows that 21.6 percent discontinued for academic reasons, 51.4 percent for reasons related to marriage, 13.5 percent for financial reasons, and 13.5 percent because of illness. Or, in other words,

almost two out of three Indiana University women who discontinue their education completely, do so because of illness or because of marriage and family."

Eastern Michigan. — "It is of local interest to Eastern Michigan College that one of the complaints that we hear most often among our active student body is an inadequate orientation, guidance, and advisory program. It is interesting to note that only two percent of the dropouts listed this as having an influence on their withdrawing from school."

Maryland State Teachers College, Towson. — "Lack of funds as the principal reason for withdrawal does not stand very high on the list . . . this . . . is . . . a reflection of the particular situation . . . the entire program at Towson is heavily endowed by the State . . . there is no real problem of students' . . . dropping out because of inability to receive or maintain scholarship grants."

University of Connecticut. — "The most important reason for dropping out of the University of Connecticut was academic, given by 27.3 percent. Eight percent said financial although . . . twice as many said they would have continued if their financial circumstances could have been improved."

Colgate University. — "Finances do not seem to be important as a reason for leaving college. Colgate attempts to provide sufficient financial assistance . . . while, on the one hand, opinion seems to be widespread that recent pressures on college enrollments have been due in part to the increased ability of more people to finance a college education, there has also been, on the other hand, the belief that the cost of attending a liberal arts college presented a real financial hurdle for many students. Yet only one student listed financial difficulty as an important reason for discontinuing, while two others said that they had difficulty in meeting the financial costs."

Temple University. — "Financial need (32.4 percent) and academic difficulties (32.2 percent) were the two major causes, as reported by the dropouts, for their decision to leave school."

Pratt Institute. — "Course considerations ranked first in importance, Personal and financial reasons ranked next."

Grinnell College. — "The main reasons for men dropping out at the end of the first semester were poor grades and lack of educational objectives, in that order. Men dropping out at the end of the second semester had as their main reason finances. The men who dropped out at the end of the third semester did so because of a lack of educational objectives whereas those who dropped out at the end of four semesters gave as the cause a change of major field of study . . . the women who dropped out at the end of the first semester had as their only reason finances, while those who dropped out at the end of the freshman year did so because of marriage or a desire for more social life, primarily. At the end of three semesters the reason was marriage, and at the end of four semesters the women

discontinuees had, as their primary reasons, inadequacy of department programs and marriage, in that order. The women discontinuees gave as the cause, at the end of five semesters, finances, and at the end of the junior year, marriage."

Status of dropouts

As Dean Stanford of the University of Illinois points out, not all college dropouts stay out. The majority return. The difficulty of assessing the status of the dropout is that he takes such a long time establishing himself.

Table 10 delineates the current academic status and future plans of students who left 18 of the participating institutions during or at the end of the 1956–57 academic year. More than half of the dropouts, 51 percent,

TABLE 10. — *Status of 2,187 students who dropped out of 18 participating institutions of first registration, by control: 1956-57*

Status	Total (18)		Public (10)		Private (8)	
	Number	Percent	Number	Percent	Number	Percent
Transferred to another institution	819	37.4	505	35.7	314	40.6
Transferred, plan to return to original institution	186	8.5	148	10.5	38	4.9
Transferred, no plan to return to original institution	633	28.9	357	25.2	276	35.7
Not transferred to another institution	1,368	62.6	908	64.3	460	59.4
Not transferred, plan to transfer	304	13.9	195	13.8	109	14.1
Not transferred, no plan to transfer	1,064	48.7	713	50.5	351	45.3
Not transferred, plan to return to original institution	999	45.7	664	47.0	335	43.3
Not transferred, no plan to return to original institution	369	16.9	244	17.3	125	16.1
Total	2,187	100.0	1,413	100.0	774	100.0

had transferred or were planning to transfer, and 54 percent were planning to return to the reporting institution. Publicly controlled institutions could expect to get back a higher percentage of their dropouts than could privately controlled institutions, 58 v. 48. Since nearly 60 percent of the students leaving privately controlled institutions and 36 percent of those leaving publicly controlled institutions named reasons connected with academic difficulty (table 9), this suggests a tendency of dropouts to stay away from the original institution where academic problems were the primary cause of withdrawal.

Some of the data on the status of dropouts in the *Retention and Withdrawal of College Students* and in the 20–college study are comparable. To construct table 11, figures were adapted from table 47, page 90, of the *Retention and Withdrawal* report by eliminating the dropouts in the categories for which there were no reasonably comparable data. The "transferred and/or graduated" category shows a higher percentage for the earlier study because the early dropouts had a longer period of time, 1950–54, in which to return to college.

Of the 1,876 students who entered publicly controlled institutions as freshmen in 1950 and dropped out before graduation, the percentage reporting plans for further college attendance did not differ significantly from the percentage of the 1,413 students of all classes reporting such plans who dropped out of the 10 publicly controlled institutions during the academic year 1956–57. The records of the two groups from privately controlled institutions, however, were not so much alike.

The data indicate a relatively constant mortality rate of about 14 percent among the dropouts — in terms of intentions. Individual institutions could evaluate their admission policies and practices with that norm, but

TABLE 11. — *Comparison of college attendance plans and status of dropouts in two studies: Retention and Withdrawal of College Students 1950-54 (R & W) and 20-college study 1956-57 (20 colleges), by control*

College attendance plans and status of dropouts	Percent of dropouts					
	Public and Private		Public		Private	
	R.&W. 1950-54	20-college 1956-57	R.&W. 1950-54	20-college 1956-57	R.&W. 1950-54	20-college 1956-57
No plans to return to college	14.0	14.3	15.1	17.4	12.5	8.8
Will return to some college	40.3	48.2	45.0	46.9	33.5	50.6
Transferred and/or graduated	45.7	37.5	39.9	35.7	54.0	40.6
Number	3,157	2,187	1,876	1,413	1,281	774

they could make more valid appraisals from their own annual records of the proportions of their dropouts who have no intention of reenrolling in any college, who intend to continue their education, and who actually do continue.

In 1962, the University of Illinois made a longitudinal study of its dropouts.[6] Bruce K. Eckland and Anita C. Smith of the Illinois Office of Instructional Research conducted a 10-year followup of 1,332 men of the University's freshman class of September 1952. Their data seem to invalidate the assumption that a large number of qualified students who should be graduating are not.[7] Five out of 10 male freshmen graduated within the normal 4–year period — 4 from the University and 1 elsewhere. Five out of 10 dropped out, but 3 returned; 1 graduated at Illinois, 1 graduated elsewhere, and 1 did not graduate. Thus, 7 out of 10 entrants graduated within the 10 years.[8] Half of those dropped for scholastic reasons eventually received a degree.[9]

The 1962 report warns that these high graduation rates can be generalized only with caution:

> The rates, however, at the University of Illinois and other state-supported universities are comparable enough to suggest that the prolonged academic careers and eventually high rate of graduation disclosed in this study might be generalized to male students in most state-supported universities during the period of this study. If this is true, one could generalize that a ten-year rate of graduation is well over twice as high as the four-year rate from all these institutions.[10]

Other longitudinal studies covering diverse types of institutions must be conducted and the information pooled to determine the representativeness of the 20–college or of the Illinois study. Longitudinal studies of the entering classes of the 1960's might show the effects of increased loan and scholarship assistance, of more selective admissions, and of rising college costs.

Where dropouts transfer or plan to transfer

It is risky to base policy decisions on dropouts' statements of reenrollment intentions, for comparisons of plans with performance (table 12) show that the two may be far from identical — or those who had transferred and those who stated plans were qualitatively different groups. Two-thirds of the students who planned to transfer from private institutions indicated that they would go to other institutions in the same State; only one-third of the transfer students did. None of the 109 dropouts

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[6] Bruce K. Eckland and Anita C. Smith. *A Follow-Up Survey of Male Members of the Freshman Class of the University of Illinois in September 1952.* University of Illinois Office of Instructional Research, Report No. 105. Office of Publication, 49 Administration Building (West), Urbana, Illinois. May, 1962.

[7] *Ibid.*, p. 1.

[8] *Ibid.*, p. 19.

[9] *Ibid.*, p. 7.

[10] *Ibid.*, p. 21.

planned to transfer from one to another private institution, but nearly two-thirds of the 314 transfer students from private institutions went to other private schools.

Almost two-thirds of all withdrawals who transferred went to institutions under the same control as that from which they withdrew. However, the majority (70 percent) went to different types of institutions. A significantly higher percentage of withdrawals from public (nearly 80) than from private institutions (less than 60) went to a different type of institution. Since academic problems were more important as reasons for withdrawal from private institutions, this suggests that, if dropouts from private schools were searching for a solution to their academic problems, they were not depending on a change in type of institution. However, they did tend (two-thirds) to transfer out-of-State — compared to the public school transferees, of whom only one-fourth migrated.

Comparison of the 1950–54 *Retention and Withdrawal* study group and the 1956–57 transfer group reveals several parallels and a few dissimilarities. The percentages of transfers from public institutions to institutions of the same type are similar — 23.6 percent for the 1950–54 period and 20.8 percent for the 1956–57 group. However, the percentages of transfer from private institutions to institutions of the same type differed — 24.8 percent in the earlier study, 41.6 percent in the 20–college study.

As reported in the earlier study, of 1,475 students who transferred from 147 institutions during a 4–year span, 32 percent of the 718 private college

TABLE 12. — *Characteristics of institutions to which students who have dropped out of the institution of first registration have transferred or plan to transfer, by control of institution of first registration: 1956-57*

Characteristic of second institution	Percent of drop-out students by control					
	Who have transferred from			Who plan to transfer from		
	Total	Public	Private	Total	Public	Private
In same State as first institution	64.4	76.9	33.6	53.0	50.0	66.7
Of the same type (university, teachers college, etc.)	30.0	20.8	41.6	37.9	25.9	53.7
Under same type of control (public, private)	65.6	66.0	64.2	25.8	45.9	0
Number	819	505	314	304	195	109

NOTE: The underlined percentages are significantly higher than the corresponding percentages for institutions under the other control.

respondents transferred to in-State colleges and universities. The corresponding percentage for the 314 transfers of the 20–college study is 34. However, the percentage gap for public school transfers is great: from 1950 through 1954, 57.4 percent of the students transferred within the State, as compared with 76.9 percent in 1956–57. This difference is striking because the 1950–54 record included transfers from junior colleges, who, although relatively small in numbers, would be expected to increase the percentage of within-State transfers. This phenomenon might be due to increasing out-of-State tuition fees, changes in the names of institutions within a State (teachers colleges to State colleges), and the establishment of junior colleges or other new institutions.

Time dropouts plan to return to college

The stated plans of dropouts from publicly and privately controlled institutions were much the same. More than half of the respondents

TABLE 13. — *Plans of dropouts to reenter higher education institutions, by control of institution which they left: 1956–57*

Item	Type of control of institution dropouts left		
	Total	Public	Private
Number of dropouts from participating institutions	2,187	1,413	774
Number who had transferred to another institution	820	505	315
Percent who had transferred to another institution	37.5	35.7	40.7
Number of unenrolled dropouts (nontransfers)	1,367	908	459
Number of nontransfers planning to reenter higher education	1,054	663	391
Percent of nontransfers planning to reenter higher education	77.1	73.0	85.2
Number specifying time they plan to reenter	775	565	210
Percent specifying time they plan to reenter	73.5	85.2	53.7
Percent planning to reenter next fall after dropout	53.5	54.2	51.9
Percent planning to reenter later next year after dropout	7.1	9.7	0
Percent planning to reenter fall of following year	24.4	23.5	26.7
Percent planning to reenter after fall of following year	15.0	12.6	21.4

expected to be back in school at the beginning of the 1957 fall registration period (table 13); approximately one-fourth planned to reenroll in the fall of 1958. Fully 85 percent of the dropouts who responded and who were planning to reenroll expected to do so with a loss of no more than 2 years. The 27 percent of those planning to return who did not specify the time probably would tend to give a later rather than an early date, had they responded.

Reenrollment plans of active students

Nearly 85 percent of all active student respondents were planning to reenroll (table 14). Of the 622 who reported no plan for reenrollment, 116 or 19 percent gave academic reasons; 74 or 12 percent gave health and/or family reasons, and 53 or 9 percent gave financial reasons. Of the 1,013 who were uncertain about reenrolling, 348 or 34 percent gave financial reasons; 211 or 21 percent gave academic reasons; and 148 or 15 percent gave health and/or family reasons.

Active students who were enrolled in privately controlled institutions and who were not planning to reenroll or were uncertain had higher percentages giving academic reasons than were given by corresponding students enrolled in publicly controlled institutions, 25 percent versus 16

TABLE 14. — *Reenrollment plans of active students, by control: 1956-57*

Reenrollment plans and reasons given by active students[1]	Percent reporting		
	Total	Public	Private
Plan to reenroll	84.5	84.5	84.4
No plan to reenroll	5.9	5.8	6.0
Uncertain about reenrolling	9.7	9.7	9.6
Do not plan to reenroll — no statement	3.6	3.7	3.4
Uncertain — no statement	3.0	3.9	1.9
Do not plan to reenroll — academic matters	1.1	.8	1.5
Uncertain — academic matters	2.0	1.7	2.3
Do not plan to reenroll — financial matters	.5	.5	.6
Uncertain — financial matters	3.3	3.3	3.3
Do not plan to reenroll — health and/or family	.7	.8	.5
Uncertain — health and/or family	1.4	.8	2.1
Number of students	[2]10,549	5,720	4,829

[1] Of the approximately 15 percent who did not plan to reenroll or who were uncertain about plans, 60 percent supplied reasons.

[2] Students who expected to graduate no later than summer of the 1956-57 academic year were excluded.

percent. It would be generally agreed that the composite degree of selectivity of students was higher in the privately than in the publicly controlled institutions, yet the percentage of prospective nonreturnees for academic reasons was higher for privately controlled institutions. No difference was found between the two groups in percentages giving financial reasons, but 17 percent of those either not planning to return or uncertain about returning in the privately controlled gave health and/or family reasons as compared with 10 percent in publicly controlled institutions.

The extent to which individual institutions can use with confidence the figures on dropout and reenrollment for planning purposes is limited because of the wide ranges around the averages. For example, a mean of 36 percent of dropouts from public institutions transferred to other institutions, but the range in percentages among the 10 institutions was from 16 to 51. Similarly, 54 percent of all dropouts planned to return to the institutions from which they dropped out, but the range in percentages was from 0.5 to 66. These ranges show that each institution in its planning must examine its own record of experience rather than rely on measures of central tendency derived from the records of groups of institutions.

Chapter 5

Comparative Qualifications and Characteristics of No-Shows, Dropouts, and Active Students

Studies of the similarities and differences between students admitted to college who enroll in college and those who do not enroll, and between students who remain in college and those who drop out, are incomplete without consideration of the student ability levels. In this chapter the comparative qualifications of the students are discussed in terms of the standings in high school graduating class and on college placement tests, two indices of the level of student ability generally recognized as having considerable validity.

As used here, the phrase "college placement tests" includes any test or test battery administered to entering students in the 20 colleges. The resulting student standings were expressed in terms of tenths, or deciles, on local distributions. For both high school and placement test standings shown in the tables and chart which follow, the top tenth has been designated "1" and the bottom tenth "10." The mean placement test standing therefore would be 5.50 for the total, or for a representative sample of the population tested.

High school standing

Six institutions under public control and 4 under private control provided data on rank in high school graduating class for all 3 study groups — no-shows, dropouts, and active students. The data are presented in table 15. The means derived from the matched totals show that, in the 6 publicly controlled institutions, the mean high school tenth of the no-shows for 1956 and 1957 combined was 2.08; of the dropouts, 3.38; and of the active students, 2.43. In 4 institutions under private control, the corresponding means were 1.93, 3.18, and 2.38. In other words, by this measure, no-shows were superior to active students, and the latter outranked the dropouts.

Data were reported on rank in high school graduating class by fifths for 9,281 students for 1956–57. It should be noted that this number does not represent the total of those admitted that year because the dropouts and active students represent admissions for earlier years as well. Moreover, the institutions represented in the 3 status groups are not exactly identical and high school ranks were not available for all students. Table 16 summarizes the data available.

TABLE 15. — *Mean standing in high school graduating class of sample of first-time students admitted, of no-shows, of dropouts, and of active students in 10 institutions*

Institution[1]	Mean tenth in high school graduating class			
	Total[2]	No-shows[3]	Dropouts[3]	Active Students[4]
A	2.85	2.82	3.30	2.76
B	2.67	2.15	4.17	2.99
C	1.56	1.83	2.24	1.17
D	1.89	1.55	3.50	2.35
E	2.65	2.14	3.32	2.64
F	2.24	1.72	2.90	2.22
Total 6 public	2.47	2.08	3.38	2.43
Number	6,120	2,724	1,231	2,165
G	1.74	1.45	2.48	1.69
H	2.39	2.10	3.94	2.21
I	2.14	1.96	2.50	2.11
J	3.13	2.27	4.20	3.24
Total 4 private	2.34	1.93	3.18	2.38
Number	1,694	680	295	719
Total 10 institutions	2.44	2.05	3.34	2.42
Number	7,814	3,404	1,526	2,884

[1] Code letters do not necessarily correspond with those in other tables.
[2] No-shows, dropouts, and active students combined.
[3] Fall of 1956 and 1957 combined. Dropouts are for the preceding 12 months.
[4] Academic year 1956–57.

About 60 percent of no-shows were in the top fifth of their high school graduating classes. Corresponding percentages were, for dropouts, 32, and for active students, 46. For all 3 study populations the percentages in the second fifth were remarkably close — 26.4 for no-shows, 26.5 for dropouts, and 25.6 for active students. About 73 percent of the students included in table 16 graduated in the top two-fifths of their high school classes as compared with 12 percent in the bottom two-fifths. The greatest percentage contrast in the ranking was found in the no-show group and the most equal distribution in the dropout group.

Mean standings for the 3 groups of students are shown on chart 1 for the 6 publicly and 4 privately controlled institutions that were able to provide reasonably complete data on standing in high school graduating class. In 8 of the 10 institutions the significantly higher means for no-shows than for active students ruled out the probability of chance. In all 10 reporting institutions the means for dropouts were significantly lower than the means for either no-shows or for currently enrolled students. For each

CHART 1—Comparison of no-shows, dropouts, active students, and all admitted students in terms of standing in high school graduating class in 6 publicly and 4 privately controlled institutions—1956 and 1957 combined

TABLE 16. — *Standing in high school graduating class of no-shows, dropouts, and active students, 1956-57*

Fifth in high school graduating class	Percent in each fifth of high school class, by status group			
	Total	No-shows	Dropouts	Active
Top	46.6	59.8	31.8	46.3
2	26.1	26.4	26.5	25.6
3	14.9	8.6	19.4	16.3
4	9.4	3.8	14.3	10.2
5	3.0	1.4	8.0	1.6
Number	9,281	2,536	2,187	4,558
Mean fifth	1.96	1.61	2.40	1.95

institution the longer solid line labeled *T* shows the mean level for all admitted students.

Several notable configurations are evident in the chart. For example, despite difference in control, *Public Institution B* and *Private Institution J* have very similar patterns. The mean high school standings of dropouts in 4 institutions were higher than the mean standings of active students in *Institutions B and J*. In *Institution C* the mean level of dropouts was equal to, or above, the means of active students in 7 of the 9 other institutions. These profiles demonstrate the marked diversity in student capability among the 10 institutions as measured by rank in high school graduating class.

Table 17 gives a rough approximation of the relative high school standing of groups in the two studies. The students in the sample from the entering classes in the fall of 1950 for whom standings in high school graduating classes were reported showed a mean of 3.65, with women holding an advantage of 1.14 over men. The students from this group who graduated 4 years later from the colleges of original registration had a mean standing of 2.87 with a difference of 0.85 between men and women. The mean standing of those who discontinued was 4.14. The difference of 1.27 between the means for graduates and dropouts is significant at the 1 percent level.

It is clear from the findings that, with one exception, the 20 institutions lost good students as no-shows and as dropouts, particularly the transfers. As Temple University concluded, "... On the basis of high school quintile rank in his graduating class, the 'admitted non-attendant' is apparently a capable student ..." That would be the general conclusion as well.

TABLE 17. — *Mean tenth in high school graduating class of groups of students in two studies: Retention and Withdrawal of College Students v. 20-college study of active students, dropouts, and no-shows*

Group	Mean tenth in high school graduating class					
	1950 R.&W. study			20-college study		
	Total	Men	Women	Total	Men	Women
Total	3.65	4.12	2.98	2.92	.....	.....
Active students	2.87	3.22	2.37	[1]2.74		
Dropouts, excluding known transfers	4.14	4.69	3.74	[2]3.78	.....	.....
No-shows (10 institutions)	.....	.....	.....	[3]2.64	[3]2.94	[3]2.14

[1] Mean for 4,558 active students entering from 1952 to 1957 inclusive.

[2] Mean for 2,187 dropouts entering from 1952 to 1956 inclusive and dropping out during 1956-57 academic year.

[3] Mean for 1956 and 1957 no-shows combined.

College placement test standing

In contrast to the availability of reasonably complete information on standing in high school graduating class from 10 institutions, there were very meager placement test data in the study samples from the 20 colleges. Only 1 privately controlled and 3 publicly controlled institutions reported decile standings for both dropouts and active students. Since placement data were usually obtained during registration, the institutions that did not require college entrance board or other test for admission had no results to report for no-shows.

For the 4 institutions reporting placement data, the mean tenth for 675 dropouts was 4.87, and, for 1,971 students who were still in attendance, the mean placement test standing was 4.22. The mean standing of active students was significantly higher, tending to confirm the conclusions indicated by the differences in standing in high school graduating classes.

Comparison between the two studies

Direct comparisons of high school and placement test standings between findings of the earlier *Retention and Withdrawal* study and findings in the 20–college study are difficult to make because of differences in methods of gathering data. Despite the limitations, those comparisons that can be made raise interesting points.

In terms of both high school and placement tenths, the means for dropouts in the *Retention and Withdrawal* study and in the 20–college study were significantly lower than the corresponding means for the active students (table 18). But the mean high school tenth of dropouts in the

Retention and Withdrawal study was significantly lower than that for 20–college dropouts. The difference of 0.13 in mean tenths for active students was not significant, but the difference of 0.66 between the totals for the 2 studies was significant, lending support to the hypothesis that admissions standards had been raised appreciably during the interval between the 2 studies. Several factors suggest caution, however, in attributing the higher rank in high school graduating class of the 20–college group solely to greater selectivity. It will be noted, for example, that the 6,745 students in the 20–college study entered over a period extending from the fall of 1952 through the fall of 1957, whereas all of the students in the *Retention and Withdrawal* study entered as first-time students in the fall of 1950. If comparable data were available for each of the 6 years and if they confirmed a trend, more credence could be attached to the hypothesis of greater selectivity. On the other hand, if it is assumed that the mean high school standings of no-shows for 1956 and 1957 (table 17) reflect the trend for enrollees as well, there is highly contradictory evidence.

In the 20–college study, the differences in mean standings are not large

TABLE 18. — *Comparisons of mean high school tenth and college placement test standings in two studies, by active and dropout status*

Items and studies	Number and mean tenth standing, by status					
	Total		Active students		Dropouts	
	Number	Mean tenth	Number	Mean tenth	Number	Mean tenth
Tenth in high school graduating class:						
Retention and Withdrawal study[1]	7,881	3.74	4,100	2.87	3,781	4.69
20-college study[2]	6,745	3.08	4,558	2.74	2,187	3.78
Tenth on college placement test:[3]						
Retention and Withdrawal study[1]	11,404	5.29	4,189	4.72	7,215	5.62
20-college study[2]	3,371	4.60	1,971	4.22	1,400	5.13

[1] Standings of active students (graduates) and dropouts as first-time students entering 147 colleges in fall of 1950.

[2] Standings of active students and dropouts as first-time students entering 20 colleges from 1952 to 1957.

[3] Based on local distributions; therefore mean for total must be 5.50 by the method of calculation.

NOTE: Top tenth is designated by 1 and bottom tenth by 10; therefore the higher the mean, the lower the rank.

enough to justify the conclusion that either high school rank or college placement test standing can differentiate unerringly between students who will drop out and those who will persist in attendance. This is generally the finding of recent educational research. In 1964, Constance Waller's study of research related to college persistence[1] reported that there seems to have been no significant increase in the correlation of from .47 to .60 between rank in high school class and first semester marks in college since Butsch's study in 1939. Even though colleges are admitting more students of higher ability, as shown in college profiles, the correlations have not increased. This, again, questions the college grading system, the criterion against which these predictors are measured. The comparability of class ranks among different high schools has also been questioned by researchers. Waller concludes that if rank is to be used as a criterion, "it should be adjusted for each school as far as possible."[2]

In the 1964 report, Waller also concludes, from various studies on tests as predictors, that test data should be used with other data: Multiple correlations of test scores and high school records gave higher predictions of success than test scores used alone.[3]

There is evidence, however, from the 20–college study and other studies, that applicants with poorer records on either measure represent a decidedly greater survival risk than do entrants who have better scores.

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[1] Constance Waller, "Research Related to College Persistence." *College and University*, Vol. 39, No. 3, pp. 281–94, Spring 1964.

[2] *Ibid.*, pp. 284–5.

[3] *Ibid.*, pp. 285–6.

Chapter 6

Sources of Funds for Defraying College Expenses — Family Income, Student Employment, and Scholarship Assistance

Certain central tendencies appear in the distribution of college student responses to the inquiry, "Where did you get the money to pay the costs of attending college?" Equally discernable are the different patterns of sources of funds. More than half of the expenses of students attending college were defrayed with funds provided by the families of students, more than one-fifth from personal savings and about one-seventh from earnings of students while in college. Similarities and differences in patterns are shown in table 19 where percentages of active students and dropouts using the several sources can be compared. Larger percentages of active students than dropouts tended to use the sources but the mean percentages of expenses defrayed by students using the sources tended to be higher for the dropouts.

One of six active students used college scholarship assistance compared with 1 of 16 dropouts. The mean percent of expenses defrayed with scholarship funds was slightly higher for dropouts. Only 2.4 percent of nearly 13,000 reporting active students and dropouts used college loan funds to defray college expenses, and 2.3 percent used other loan funds.

Seventeen of the 20 institutions participated in the NDEA student loan program in 1959-60. They reported that 5.1 percent of full-time undergraduates borrowed under that program (about the same as the 5 percent nationwide average) and that 1.9 percent were known to have used other loan funds. Reports by institutions and by students are not precisely comparable in the "other loans" category but the figures representing loans administered by the institutions would indicate that the percentage borrowing under the NDEA program alone in 1959–60 was higher than the percentage of all borrowers in 1956–57, 5.1 percent v. a maximum of 4.7 percent. The term "maximum" applies because of the duplicates in the 2.4 and 2.3 percentage figures.

In spite of the relatively small numbers involved (at most 604 active and 78 dropout students), there was some evidence that defraying college expenses with college loan funds was associated with dropout, particularly in privately controlled institutions, where the ratio of the weighted mean percent of expenses paid from college and other loan funds was 2.3 for 53 dropouts to 1 for 306 active students. The relationship, however, is

TABLE 19. — *Sources of funds devoted to defraying college expenses, and mean percent of expenses defrayed by students using each source, by persistence status, by control: 1956-57*

Source of funds	Percent of students using source						Mean percent of expenses defrayed per student by students using funds from each source					
	Active students			Dropouts			Active students			Dropouts		
	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Family	85.4	87.2	83.3	79.3	75.1	86.3	62.7	64.3	61.0	66.1	64.0	68.8
Personal savings	66.9	70.2	62.9	64.4	65.2	63.1	29.5	30.7	28.2	38.1	43.2	30.3
Work — on campus	23.4	25.0	21.1	15.9	12.3	21.9	17.3	18.0	16.2	20.4	21.8	19.1
Work — off campus	34.0	28.6	41.7	25.5	25.6	24.9	31.5	30.3	32.4	38.1	37.6	39.5
Church	2.0	2.0	2.2	1.4	1.0	2.9	17.0	10.0	25.3	13.0	7.0	20.0
Civic organizations	1.6	1.7	1.5	2.9	3.6	0.5	16.1	15.8	16.8	19.0	19.3	11.2
College scholarships	17.5	15.6	20.1	6.6	5.7	9.3	24.7	16.9	32.3	28.3	25.7	33.3
Other scholarships	12.2	9.3	16.3	5.4	5.3	5.7	32.0	27.8	35.1	33.8	34.6	31.2
College loan funds	2.8	2.7	2.9	2.2	1.8	3.6	15.1	12.9	17.8	24.2	23.6	25.1
Other loans	2.7	2.7	2.6	2.0	1.5	3.4	23.5	21.3	26.7	37.7	24.2	55.4
Other funds	12.8	12.3	13.2	12.6	12.5	13.0	52.8	54.3	51.3	62.5	65.4	54.5
Number reporting source	10,983	5,423	5,560	1,859	1,098	761						

clouded by other factors contributing to dropout so that it is not possible to isolate the influence of financial stress, despite the assumption that the act of obtaining a loan is evidence of need. Certainly the contrast between the relationships of scholarships and loans to persistence would be clearer if it could be established that scholarship grants were as closely associated with financial need as were loans. The ratio of 4.1 to 1.8 (2.3 to 1) in favor of college scholarships as a persistence stimulant has as many limitations as the inverse ratio against loan funds except for the greater number of students involved in the scholarship category.

The percentages of students using "other" (noncollege) funds were practically the same for active and for dropout students in both publicly and privately controlled institutions. The proportion of these funds that could be classified as veterans' benefits was probably too low to justify any inferences with regard to their effect on type of control of institution attended or on student persistence.

Reports of other studies of sources of funds for defraying college expenses, although not uniform in amounts, show strong similarities in relative dimensions. A 1959–60 study at the University of Michigan reported that of the mean total expense of $1,550 for 232 unmarried students, 61.3 percent came from parents and 23.2 percent from students' earnings. Scholarships accounted for 8.4 percent, and 7.1 percent was derived from miscellaneous sources. This is roughly comparable to the rank order of importance of sources of funds and percentage of expenses defrayed from each source as shown in the total column for active students in table 20.[1] In 1961, the University Committee on Student Economics at the University of Illinois reported that the largest single source, again, for single students for the second semester of 1959–60 was the students' families; that figure added to the students' earnings and assets accounted for almost three quarters of the available funds.[2] The University of Wisconsin reported in 1961 that, according to the mean amounts from each source and from a sample of 1,075 of the 1960–61 students, the sources furnishing the lion's share of the total costs were — in order of decreasing importance — family, employment, savings, and scholarships.[3] Thus, although percentage uses of various sources of funds vary from individual to individual and from institution to institution, the relative importance of the various sources to the average student is clear.

Family income

The ability of a family to provide financial assistance to a student can have a significant influence on whether, where, and how long a student

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[1] John B. Lansing, Thomas Lorimer, Chikashi Moriguchi. *How People Pay for College*, Survey Research Center, Institute for Social Research, The University of Michigan, 1960.

[2] American Council on Education. *American Universities and Colleges*, ed. by Allan M. Cartter. Washington, D.C.: American Council on Education. Ninth edition, 1964. p. 45.

[3] L. J. Lins. *Student-Expenses and Sources of Income 1960–61 Academic Year, The University of Wisconsin Madison Campus.* The University of Wisconsin Office of Institutional Studies, October 1961. p. 39.

TABLE 20.—*Weighted mean percent of college expenses defrayed with funds from several sources by active students and dropouts, by control: 1956-57*

Source of funds	Total		Public control		Private control	
	Active students	Dropouts	Active students	Dropouts	Active students	Dropouts
Family, including relatives	51.2	50.7	53.9	47.3	47.8	55.1
Personal savings	18.9	23.7	20.7	27.7	16.7	17.7
On-campus work	3.9	3.1	4.3	2.6	3.2	3.9
Off-campus work	10.2	9.4	8.3	9.5	12.7	9.1
Church	.3	.2	.2	.1	.5	.5
Civic organizations	.3	.5	.3	.7	.2	.1
College scholarships(s)	4.1	1.8	2.5	1.4	6.1	2.9
Other scholarships(s)	3.7	1.8	2.5	1.8	5.4	1.6
College loan funds	.4	.5	.3	.4	.5	.8
Other loan(s)	.6	.7	.6	.4	.6	1.7
Other funds	6.4	7.6	6.4	8.1	6.3	6.6
Number reporting source and percentage	9,410	1,495	4,778	838	4,632	657
Number reporting source	10,983	1,859	5,423	1,098	5,560	761
Percent reporting both	85.7	80.4	88.1	76.3	83.3	86.3

NOTE: The weighted mean percentage of expenses defrayed from each source was derived by multiplying the mean percent defrayed per student by the percent using it.

The numbers of students in tables 19 and 20 are different because some students reported sources but did not show percentages. Weighed mean percentages could be obtained only on the basis of those reporting use in terms of percentages. For all active students and dropouts combined, the percent reporting both was 85; in publicly controlled institutions, 86; and in privately controlled, 84.

attends college. Certainly, individual families, institutions, and studies have placed and will place varying degrees of importance on family assistance as a determinant of a student's educational progress. Nevertheless, it is an undeniably important factor for the majority of students.

Theoretically, a good single index of ability to pay is family income. However, it has serious deficiencies when considered alone because of differences in size of family and in standards of living. The reliability of a student's estimate of the family income is also subject to question, but several institutions in the 20-college study checked student estimates against other information sources presumed to be reliable, such as the

TABLE 21. — *Family incomes estimated by students, by institution, by control: 1953 and 1956*

Institutions	1953				1956[1]			
	Number of families	Q1	Median	Q3	Number of families	Q1	Median	Q3
Total (19 institutions)	1,569	$4,162	$5,838	$9,111	12,011	$4,568	$6,304	$9,570
Publicly controlled (10 institutions)	1,033	4,280	5,765	8,418	6,444	4,724	6,373	9,366
Bowling Green	149	3,930	5,530	7,510	868	4,580	6,090	8,800
Eastern Michigan	45	4,400	5,250	6,190	867	4,880	6,240	9,210
Georgia Institute of Technology	65	5,130	7,107	10,000†	695	5,010	6,910	10,000†
Indiana University	223	4,340	6,200	9,730	606	4,980	6,730	10,000†
Maryland State College—Towson	55	3,420	5,290	6,750	251	4,460	5,560	6,980
Mary Washington College	24	4,250	5,830	8,500	453	6,000	8,710	10,000†
Pennsylvania State University	232	4,360	6,060	8,750	619	4,290	6,060	9,180
University of Connecticut	77	4,170	5,350	7,660	277	4,220	5,570	7,640
University of Tennessee	37	4,380	5,500	6,630	1,188	4,050	6,030	7,000
Wayne State University	106	4,590	5,590	6,960	620	4,620	6,090	8,480
Privately controlled (9 institutions)	536	3,877	6,067	10,000†	5,567	4,395	6,206	9,864
Berea College	90	1,750	3,040	3,980	259	2,060	3,330	4,400
Carson-Newman College	27	3,130	4,500	5,880	351	2,180	3,690	5,220
Colgate University	37	5,420	7,750	10,000†	206	7,030	10,000†	10,000†
Cornell University	122	4,940	7,880	10,000†	885	6,380	10,000†	10,000†
Georgetown University	61	6,040	10,000†	10,000†	153	7,960	10,000†	10,000†
Gettysburg College	20	4,000	6,000	7,670	177	4,920	6,500	9,380
Grinnell College	86	6,080	10,000†	10,000†	322	5,800	9,030	10,000†
Pratt Institute	46	4,280	5,360	7,300	986	4,330	5,860	7,890
Temple University	47	4,380	5,690	7,680	2,228	4,370	5,790	8,480

[1] Only students who were still in attendance are included in the 1956 tabulation.

† Income of $10,000 or more.

College Scholarship Service of the College Entrance Examination Board, and found very small differences in the medians. Furthermore, the rank order correlation between the 1953 and 1956 medians shown in table 21 was found to be .85, which indicates a high degree of correspondence and reflects favorably upon the reliability of the students' estimates if it is assumed that the institutions in the study tend to draw their students from the same relative income levels from year to year.

Estimates of family income by active students of 19 of the 20 institutions in the study are presented with those of two other related studies in table 22. The median family income for a sample of active students in 19 colleges in 1953 was $5,947, as compared with a median of $6,304 for a sample of active students in the same institutions in 1956. The difference of less than $360 in median income would probably not net enough to cover the increased costs of higher education over the period.

The range in family income among the 19 institutions is illustrated by the fact that the Q1 income of $7,960 reported at Georgetown University exceeded the 1956 median incomes in 14 of the 18 other institutions. Because the inquiry form provided for the grouping of all incomes of $10,000 and over in one interval, it was not possible to derive definitive measures for some institutions. The public versus private anomaly appears partly because 40 percent of the estimated family incomes in the privately controlled institutions were reported by Temple University where the 1956 median income was $583 below that for publicly controlled institutions.

TABLE 22. — *Family incomes estimated by students in related studies*

Study	Year of estimates	Number of students who reported estimates	Top of bottom 25 percent (Q1)	Median	Bottom of top 25 percent (Q3)
Costs of Attending College[1]	1952	15,041	$3,375	$4,985	$8,170
Retention and Withdrawal[2]	1953	7,644	3,984	5,706	9,221
Public control	1953	4,253	3,739	5,243	7,522
Private control	1953	3,391	4,434	6,570	10,000
Active students only	1953	3,555	4,124	5,947	9,741
19 colleges—active students[3]	1956	12,011	4,568	6,304	9,570
Public control	1956	6,444	4,724	6,373	9,366
Private control	1956	5,567	4,395	6,206	9,864

[1] U.S. Department of Health, Education, and Welfare. Office of Education. *Costs of Attending College*, Ernest V. Hollis and Associates, Bul. 1957, No. 9, Washington, U.S. Government Printing Office, 1958.

[2] U.S. Department of Health, Education, and Welfare. Office of Education. *Retention and Withdrawal of College Students*, Robert E. Iffert, Bul. 1958, No. 1, Washington, U.S. Government Printing Office, 1957.

[3] Estimates by active students in 19 institutions (10 public, 9 private) in all classes in present study.

Clearly, children of economically privileged families are not the only students able to attend college. The figures in tables 21 and 22 show that more than one-fourth of the 12,011 enrolled students estimated their 1956 family incomes at a level below the national median of $4,783 for that year. Furthermore, in 10 of the 19 institutions the family incomes of one-fourth of the 7,647 students fell below the national median family income for 1956. Thirty-six percent were in 6 institutions in which the medians of the estimated family incomes were below $6,000, and in all but 1 of the 19 institutions there was at least 1 enrollee whose 1956 family income was under $1,000. College attendance was a reality for large numbers of children of below-average-income families in a large majority of the institutions in the study.

Enlarging the perspective to cover estimates of family income by nearly 35,000 college students for 1952, 1953, and 1956, it is apparent that one-fourth of the students came from homes with an annual family income under $5,000. One-half came from homes in which the annual family income was under $7,000, and fewer than one-fourth came from homes with family incomes as high as $10,000. The percentages of all families in the United States with incomes of $10,000 and over were: 1952, 4.1; 1954, 5.8; and 1956, 7.9, and the medians for those years were $3,890, $4,173, and $4,783, respectively.[4]

Comparison of the family income levels of students in 19 institutions in 1953 with the same institutions in 1956 showed a high degree of consistency in the relative standings of the institutions. It was also noted that institutions with higher-income clientele tended to have higher percentages of students receiving scholarship aid. Since few, if any, colleges aspire to have, or to gain, the reputation of being exclusively for children of the wealthy, it is to be expected that more assistance will go to able but less affluent students in the higher income level institutions. When the 19 institutions were ranked in order of median family income as estimated by students and also in order of cost as indicated by tuition and fee charges, the rank order correlation was found to be .63, indicating a positive but far from perfect relationship.

Student employment

During the academic year 1956–57, 45 percent of the students enrolled in the 20 colleges were employed. By working an average of 18 hours per week the mean percent of expenses defrayed was approximately 48. Students who attended institutions located in centers of population over 100,000 found more and better opportunities for self-help by working at off-campus jobs than did students who attended institutions in smaller population centers where they tended to be limited to on-campus jobs. Similarly, dropouts from institutions in larger population centers tended

[4] The National Industrial Conference Board, *Road Maps of Industry*, No. 1138, 460 Park Avenue, New York, October 18, 1957. Source: Bureau of the Census.

to obtain jobs ranking higher on the occupational scale than did dropouts from colleges in areas of lesser population.

The ability and willingness of college students to finance themselves can only be inferred from rather than demonstrated by the available data. A comparison of the figures for work on-campus and off-campus shows a strong predominance of the latter. On-campus work was defined as work paid for by the institution of higher education attended by the student, regardless of where the work was performed. Work paid for by some agency other than the institution was classified as off-campus employment. More than 2½ times as much money was earned by students working at off-campus jobs than at on-campus jobs during the college year.

Table 23 shows a negative relationship between the percentage of active students engaged in on-campus work and the percentage engaged in off-campus work. Those familiar with the locations of the 14 institutions listed will recognize that the 5 with the lowest percentages (less than 20) of on-campus work and the 5 with the highest percentages (over 30) of off-campus work tend to be situated in large population centers.

In the 7 institutions with the higher percentages of active students engaged in off-campus work, 18 percent of the working students were on jobs classified as skilled, 37 percent on semiskilled jobs and 45 percent on unskilled jobs.[5] For the active students who worked and were enrolled in

[5] U.S. Department of Labor and U.S. Employment Service. *Dictionary of Occupational Titles, Part II, Titles and Codes*, Washington: U.S. Government Printing Office, Washington, June 1939. (Some institutions used more recent editions which did not affect the uniformity of the job classification.)

TABLE 23. — *Percent of active students engaged in on-campus and off-campus work in 14 institutions: 1956-57*

Institution	Percent of total undergraduates engaged in	
	On-campus work	Off-campus work
Georgetown University	4.4	15.6
Maryland State College—Towson	8.1	33.1
Temple University	9.5	58.8
Georgia Institute of Technology	10.6	21.1
Pratt Institute	13.2	35.3
Pennsylvania State University	20.1	23.8
Gettysburg College	20.8	19.0
Mary Washington College	21.4	1.7
Wayne State University	24.3	54.7
Indiana University	26.6	16.9
Eastern Michigan University	30.8	38.8
Bowling Green University	33.9	20.3
Grinnell College	40.8	9.7
Berea College	88.8	13.5

the 7 institutions where on-campus work predominated, 13 percent were employed in skilled work, 30 percent in semiskilled, and 57 percent in unskilled work. Since it is evident that the size of the community in which the institution is located and the relative percentage of students engaged in on-campus work are associated, any examination of the skill level of work performed should take this association into account.

A further analysis of the levels of work performed shows that dropouts from the 7 institutions having the highest percentages of students engaged in off-campus work tended to be employed, after dropping out, at jobs of a higher skill level than those of the dropouts from the 7 institutions with the highest percentages of on-campus work. Where off-campus work predominated, the percentages were: skilled, 24; semiskilled, 50; unskilled, 26. Where on-campus work predominated, the percentages were: skilled, 15; semiskilled, 43; unskilled, 42. These findings form the basis for the conclusion that, since higher levels of pay tend to go with higher levels of skill, college students who must depend upon their own earnings to help defray expenses will generally find better opportunities in larger population centers. Experience on the job can be more challenging and interesting

TABLE 24. — *Extent and character of employment of active students enrolled in 16 institutions, by control: 1956-57*

Item	Total and control		
	Total	Public	Private
Number of institutions reporting	16	9	7
Number of students reporting	10,425	5,726	4,699
Percent employed while students	45.5	37.9	54.9
Percent who worked part-time	38.2	31.6	46.3
Percent who worked full-time	7.3	6.3	8.6
Percent of employed engaged in:			
Clerical and sales work	44.6	39.0	51.8
Professional, semi-professional, managerial	21.6	23.8	18.8
Service occupations	19.9	24.0	14.9
Skilled, semi-skilled, unskilled	7.0	4.9	9.6
Agriculture, fishing, forestry, etc.	1.4	1.6	1.0
Occupation not given	5.5	6.7	3.9
Percent of employed reporting hours worked	87.9	86.2	89.4
Median number of hours worked per week	18.0	18.2	17.9

NOTE: Percentages underlined are significantly higher than the percentages for students enrolled in institutions under other control.

if the job involves development and improvement of skills.

Comparisons of costs of tuition, board, and room can be deceptive if other factors are not taken into consideration. A superficial examination may indicate that an institution is relatively inexpensive; it may attract students with minimum resources and give on-campus employment to large numbers of them, but if it has a cheap labor policy the real cost to the student may be considerably higher than the apparent cost at another institution.

There were 6 institutions located in population centers of more than 100,000 and 10 institutions located in smaller population centers (table 25). A slight but significantly higher percentage of the students attending institutions in large centers had been employed while attending college. Also, of the students attending institutions in large population centers, a higher percentage worked part-time, a higher percentage worked full-time, and these students tended to work more hours per week than students attending institutions in smaller population centers. The range in medians for the 10 institutions in smaller centers was from 9 to 18 hours worked per week and for the 6 institutions in larger centers the range was from

TABLE 25.—*Number and percent of active students, by employment status, type of employment, and size of population center in which institution is located: 1956-57*

Item	Numbers and percentages in institutions located in population centers		
	Total	Under 100,000	100,000 and over
Number of institutions	16	10	6
Number of students reporting	10,425	4,258	6,167
Number *not* employed while students	5,677	2,427	3,250
Percent *not* employed while students	54.5	57.0	52.7
Number who worked part-time	3,982	1,551	2,431
Percent who worked part-time	38.2	36.4	39.4
Number who worked full-time	766	280	486
Percent who worked full-time	7.3	6.6	7.9
Percent of employed engaged in:			
Professional, semi-professional, managerial		20.9	23.3
Clerical and sales work		29.5	56.0
Service occupations		32.3	9.0
Agriculture, fishing, forestry		2.4	.9
Skilled, semiskilled, unskilled		7.4	7.8
Occupation not given		7.5	3.0

NOTE: Percentages underlined are significantly higher than the percentages for students enrolled in institutions in the other population classification.

12 to 24 hours. For 1956, the median estimated family income of students enrolled in the 6 institutions in the larger population centers was $5,945 as compared with a median of $6,370 for students enrolled in institutions in smaller centers. The combination of lower family income, more employment opportunities, higher wages, and more stimulating work makes the institutions located in larger cities more attractive to students who would work part-time while attending college. Higher living costs could offset these advantages.

In 1963, Wayne State University, one of the 6 institutions situated in a populous urban area, reported its further investigation of the extent and effect of employment on its students.[6] A 1960 survey at Wayne State indicated that 76 percent of the student body either worked, or planned to work in the fall semester of that year. An extended study of the employment pattern between summer 1960 and spring 1962 showed that business and industry were the largest employers — providing 38.8 percent of the 7,718 jobs held by Wayne State students. Slightly more than two-thirds of the students who worked and studied concurrently indicated that compensation from employment was sufficient to pay their college expenses without the need to seek additional financial assistance from other sources.

Conclusive evidence that student employment was associated with persistence in attendance was not obtained in the 20–college study. Nor, as Summerskill reported in 1962, has this evidence been developed by any other studies; to the contrary, available research on this subject reveals that there is no clear or consistent relationship between self-support and part-time work and college grades or attrition.[7] Reference has been made to the nature of work performed by students on and off campus while they were enrolled in college and by dropouts after they left college. Table 26 shows that clerical and sales activities were predominant for both enrolled students and dropouts. About 45 percent of active students who worked on campus and 34 percent of the employed dropouts were found in this major occupational division. Combined professional, semiprofessional, and managerial occupations, such as accountant, insurance salesmen, draftsman, radio operator, and credit or restaurant manager, ranked second, with 22 percent of the active students and 24 percent of the dropouts holding jobs within this combination.

Jobs defined in the *Dictionary of Occupational Titles* as "service occupations," including such specific areas as kitchen help, cocktail waiter, hospital orderly, camp counselor, and watchman, ranked third and engaged 20 percent of active students. Similar jobs were held by 16 percent of dropouts. Skilled, semiskilled, and unskilled jobs, such as construction worker, gas station attendant, and truck driver, were held by 7 percent of the active students and by 17 percent of the dropouts.

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[6] *Impact of Employment on Wayne State University Students*, Office of Divisional Studies, Division of Admissions and Records, Detroit. October 1963.

[7] John Summerskill, "Dropouts From College" in *The American College*, ed. by Nevitt Sanford. Ch. 19, pp. 627–58. New York: Wiley & Sons, 1962.

TABLE 26. — *Comparison of employment records (on- and off-campus) of active students and dropouts, by control: 1956–57*

Item	Active students			Dropouts		
	Total	Public	Private	Total	Public	Private
Number of students reporting	10,425	5,726	4,699	2,108	1,303	805
Percent employed full-time	9.8	6.3	14.0	59.6	61.9	55.9
Percent employed part-time	35.7	31.6	40.8	10.8	10.6	11.1
Percent of employed engaged in:						
Professional, semiprofessional, managerial	21.6	23.8	18.8	24.1	24.3	23.6
Clerical and sales	44.7	38.9	51.8	33.6	37.7	26.4
Service occupations	19.9	24.0	14.9	15.9	14.5	18.2
Agriculture, fishing, forestry	1.4	1.6	1.0	3.0	2.5	3.7
Skilled, semiskilled, unskilled	7.0	4.9	9.6	16.8	16.9	16.8
Occupations not listed	5.4	6.8	3.9	6.6	4.0	11.3
Percent enrolled in another institution	.....	.....	.....	37.5	35.7	40.7

As rising costs of higher education exceed the ability of an increasing number of students to meet them with cash in hand, there will undoubtedly be more demands for self-help opportunities on and off college campuses. A recent Office of Education study reports that in 1959–60 the payments to students by institutions of higher education totaled $98.5 million.[8] This represents an increase of 50 percent over 1955–56, whereas enrollment increased over the same period by only 25 percent.

Experiences in institutions where cooperative work-study programs have become well established have demonstrated the difficulties encountered in making work and study activities contribute each to the other in furthering the student's education. There is evidence in this study that the problems of providing self-help opportunities for students vary widely among the institutions, depending on such factors as location of the institution; the character of the student body; the attitudes of the administration, faculty, and students; and the costs of attending the institutions. To the extent

[8] Richard C. Mattingly, *Financial Assistance for College Students: Undergraduate.* Office of Education, Bulletin 1962, No. 11. Washington: U.S. Government Printing Office, 1962.

that these determining factors are internal, colleges and universities can initiate studies and can institute programs directed toward increasing the number of work opportunities and raising the skill levels of the work provided. They can also promote acceptance by students, faculty, and administration of self-help as a normal dimension of the college experience, and improve the distribution of work opportunities relative to the needs of students.

The work experiences of active students were generally not at levels which indicated the utilization of knowledge and skills presumably acquired in their collegiate educational program. If it is assumed that the nature of the work students engage in while attending college is largely determined by the jobs available, and is undertaken primarily for the pay rather than the experience involved, disregard of training and skill utilization is not too serious. For active students, jobs would generally be considered more of an expediency than a career.

The same tolerance of failure to use training and skills should not be allowed in evaluating the kinds of jobs, usually full-time, that dropouts pursue after leaving college. In analyzing the occupational level of its apparently permanent discontinuees, Indiana University concluded that "the college experiences of this group did not, apparently, result in higher paid positions." Indiana found that no dropouts were employed at the professional level and that the 48 percent who held white-collar jobs were at the lower end of the economic scale. The combined data also produced no evidence that dropouts fared any better than full-time students in their employment situations even though withdrawals would generally be expected to seek more permanent employment at a level commensurate with their optimum skills.

It is quite likely, however, that there is a positive relationship between the kind of job held and educational level attained, although too few institutions made cross-tabulations of these items to test this hypothesis for the study sample as a whole. In discussing its active students, Wayne State University reported that "there was a tendency for employment to be related to length of time the student was in college . . . seniors with three and one-half years of college far exceeded the other classes in climbing the occupational ladder," although, as Wayne State was careful to point out, "age and experience may have been more basic factors here than length of time in college."

Two institutions, Bowling Green State University and the University of Connecticut, related occupational level of employment to high school performance. Bowling Green noted that "superior students . . . [active students] were found proportionately more often in clerical and sales occupations. Those who graduated in the lower 70 percent of their high school classes were more likely to be . . . in agricultural, semiskilled, or unskilled occupations." At the University of Connecticut, on the other hand, no evidence was found that type of employment, for the dropouts at least, was related to high school rank.

The institutional data were slightly more conclusive on the relationship between class standing at time of dropout and level of employment. Wayne State found that the later in their college careers students dropped out, "the higher they moved up the occupational ladder." Cornell University similarly observed, "It is clear that the longer a student has been in college before discontinuing, the more likely he is to be employed in a professional job providing he is employed at all." The University of Illinois 10–year followup study reported in 1963 that 52 percent of the non-graduates interviewed were employed in occupations directly or indirectly related to their field of study in college — "probably an indication that even an abbreviated time in college had some vocational benefits for them."[9] These latter conclusions, although not supported by the findings of all 20 colleges, are in agreement with recent Bureau of the Census data which show a clear relationship at the national level between educational attainment and occupation.[10] Eighty-five percent of male employed college graduates in 1959 held white-collar jobs — 47 percent in professional, technical, or kindred fields; only 40 percent, however, of males with some college short of graduation were employed in white-collar occupations, mostly in the clerical and sales categories rather than in professional and managerial positions.

College scholarships

The 1964 American Council on Education publication on *American Universities and Colleges* states that the institutions themselves are the principal source of scholarship aid: "In 1959–60 they awarded $98 million in scholarships to graduate and undergraduate students; ten years earlier they had awarded only $27 million.[11] The experiences reported by the institutions in this study indicate that scholarship funds influence students in deciding which institution they attend. Table 27 presents comparative percentages of no-shows, dropouts, and active students who received scholarships from the institutions in which they enrolled; the figures were obtained from 15 institutions which had complete data.

In all of the institutions the percentage of active students who received scholarship assistance was higher than the percentage of dropouts who had received such assistance. In 11 of the 15 institutions, the percentage of no-shows who enrolled in other institutions and received assistance was higher than the percentage of active students receiving assistance. The rank order correlation coefficient of .73 between percentages of dropouts and active students receiving scholarships suggests that the awarding of

[9] Bruce K. Eckland and Anita C. Smith, *A Follow-Up Survey of Male Members of the Freshman Class of the University of Illinois in September 1952.* Office of Instructional Research, University of Illinois Bulletin, Report No. 105. Urbana, Illinois: Office of Publication, May 1964.

[10] U.S. Department of Commerce: Bureau of the Census, and U.S. Department of Agriculture: Economic Research Service, *Educational Status, College Plans, and Occupational Status of Farm and Nonfarm Youths: October 1959.* Series Census-ERS, p. 27, No. 30, August 1961.

[11] American Council on Education. *American Universities and Colleges,* ed. by Allan M. Cartter. Washington, D.C.: American Council on Education, 1964. p. 46.

TABLE 27. — *Percent of students receiving scholarships from institutions in which they enrolled, by status in relation to reporting institution, by control: 1956–57*

Reporting institution	Percent receiving scholarship aid		
	No-shows enrolled elsewhere	Dropouts	Active students
Total	24.8	10.7	18.3
Publicly controlled	22.4	7.1	15.6
Bowling Green State University	6.5	14.5	19.2
Eastern Michigan College	22.5	6.7	26.2
Georgia Institute of Technology	25.5	5.5	9.5
Indiana University	26.0	11.2	24.2
Maryland State—Towson	27.8	7.1	8.9
Mary Washington College	9.5	2.8	9.5
Pennsylvania State University	23.4	3.2	7.7
University of Connecticut	23.6	1.5	13.7
Wayne State University	31.1	9.5	19.0
Privately controlled	29.2	15.8	20.1
Berea College	38.5	2.9	5.1
Cornell University	15.2	22.5	25.1
Georgetown University	22.7	9.9	17.6
Gettysburg College	33.6	10.0	23.3
Grinnell College	44.6	20.0	41.5
Temple University	18.3	10.2	16.7
Total	4,907	1,876	10,144
Public	3,133	1,106	5,459
Private	1,774	770	4,685

The table is read: Of the no-shows reported by Bowling Green State University, 6.5 percent of those who enrolled elsewhere received scholarship aid at the institutions they attended; of those who dropped out of Bowling Green, 14.5 percent had been recipients of scholarship aid from Bowling Green, and 19.2 percent of the students enrolled at Bowling Green were then receiving scholarship aid from Bowling Green.

aid was not made on the basis of criteria which differentiate dropouts from students who continue in attendance. The percentages of all three groups receiving scholarships — no-shows, dropouts, and active students — were higher in private than in public institutions, but the percentages of dropouts who were recipients of scholarship aid was more than twice as high for the privately controlled institutions as for the publicly controlled — 15.8 to 7.1.

Active students and dropouts also differed in the weighted mean percent of college expenses defrayed from college scholarship funds: the ratio was 2.3 to 1 in favor of the active students (table 20). In other words, $41 per $1,000 spent by active students comes from college scholarships, as compared with $18 spent by dropouts. The difference between dropouts

and active students in private institutions was again relatively greater than that between dropouts and active students in the public institutions. More than chance concurrence in the allocation of scholarship funds to active students and to dropouts is indicated by the fact that, for the 11 sources shown in table 20, the rank order correlation coefficients are .98 for the total, .98 for public and .95 for private control.

Scholarships from sources other than the college

If it is assumed that funds from churches and civic organizations were in the form of scholarships and that there were no duplications, table 19 indicates that the maximum percentages of students who received scholarship assistance from other than college sources were 15.8 of the active students and 9.7 of the dropouts. Table 19 also shows that students who receive scholarship aid from sources other than, or in addition to, the colleges, civic organizations, and churches defrayed about one-third of their college expenses from such "other" scholarship funds. The mean percentages were approximately the same for active students and for dropouts. However, in terms of the weighted mean percentages of college expenses defrayed (table 20) the figure for active students was 3.7 and for dropouts 1.8. In institutions under public control the percentages were 2.5 and 1.8, respectively; in institutions under private control, the percentages were 5.4 and 1.6, respectively.

Scholarships and persistence in college

In publicly controlled institutions the percentage of active students receiving scholarship aid was twice as high as that of dropouts who had received scholarship aid (15.6 v. 7.1). In privately controlled institutions the difference, although not so great, was also significant. The rank order correlation coefficient of .73 between percentages of active students receiving scholarships from the college and the percentages of dropouts receiving these scholarships indicates a tendency for institutions to give scholarship aid to active students and dropouts in percentages of corresponding orders of magnitude. Considering the fact that the ratio of active students to dropouts was 5 to 1 in publicly controlled and 6 to 1 in privately controlled institutions, it would appear that the higher percentage of students receiving scholarships in privately controlled institutions was not, of itself, instrumental in maintaining a correspondingly higher persistence rate. This observation, however, ignores the built-in scholarship feature that characterizes public education; hence inferences are risky.

To the extent that the limited data justify generalization, it can be said that students who persisted in college attendance received scholarship assistance in significantly greater numbers and amounts than did students who dropped out. Cliff similarly found that dropout students received less scholarship aid.[12] Eighty-three students in the Cliff study who dropped

[12] Normal Cliff. *An Investigation of Factors Associated with Dropout and Transfer by Scholarship Applicants.* Research Bulletin 62-13, Educational Testing Service, Princeton, N.J., April 1962.

out received a mean of $306 in first year scholarship assistance, 58 students who transferred received $313, and 725 students, comparable to the active students in this study, received $474.

A significantly higher percentage of no-shows received scholarship aid than did the active students who were enrolled in the reporting 15 institutions (table 27). Apparently, no-shows were influenced in their selection of an institution by scholarship awards. This conclusion is reinforced by the fact that approximately 14 per cent of no-shows stated their most important reason for enrolling where they did was scholarship assistance (table 4).

The Pennsylvania State University inferred from its findings that "The awarding of scholarships by institutions in which Penn State 'no-shows' enrolled influences not only the choice of institution, but also has a retention effect." Their report shows that 82 of the 88 no-shows (93 percent) who received scholarship assistance elsewhere were still enrolled in the other institutions at the time of the study.

Meaningful evaluative studies of the administration of scholarship aid must be made by individual institutions because of the great diversity in policy, purpose, and practice among institutions. A 2–year study conducted at Syracuse University involved 145 scholarship holders who entered Syracuse as freshmen in the fall of 1959.[13] Although scholarship holders generally do well above average academic work, it was discovered that the general attrition rate was "excessive" — one-fourth of all the holders left the University during or at the end of the first 2 years.

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[13] Charles H. Holmes. "Are Scholarship Holders Making the Grade?" *College and University*, The Journal of the AACRAO, Spring 1964.

Chapter 7

Reactions of Active Students and Dropouts to College Experiences

Active students were asked to check those statements in a list of 11 that were essentially true as they related to their own experiences in college. Dropouts were also asked to react to 11 statements, 3 of which were substantially the same as 3 in the list for the active students, and 6 of which were rephrased. The mean number of statements checked by 12,260 active students was 5, by 2,245 dropouts, 2.

Tables 28 and 29 do not provide the bases for direct comparison of reactions of active students and dropouts. The fact that 89.7 percent of active students checked the statement, "I have been generally interested in my studies," does not necessarily justify the inference that more than 10 percent were *not* interested, nor does table 29 establish the fact that 66.5 percent of the dropouts were interested in their studies. Item G is the same for both groups and indicates that more active students than dropouts felt they had to spend too much time earning expenses. Item I in table 28 and item K in table 29 are comparable, indicating a significantly higher percentage of active students than dropouts making unsuccessful attempts to improve their financial situation through scholarship assistance. Academic standing may have discouraged attempts by dropouts. Item J for active students and item I for dropouts are comparable and show a significantly higher percentage of active students than dropouts expressing the feeling that they had been treated unfairly by the institution.

In each case the comparable items were checked by significantly higher percentages of active students than of dropouts, thereby increasing the probability that there were actual differences between the reactions of the two groups to some of the other items, such as interest in studies and satisfaction with grades. A tenable inference involving the factor of time is related to the larger number of items checked by active students: opportunities for dissatisfaction, particularly in areas associated with the three identical statements — time devoted to defraying college expenses, efforts to obtain scholarship aid, and unfair incidents — multiply with length of attendance. This would seem to be the case in at least one institution with reference to statement G. "As the years go by," wrote the University of Connecticut in comparing its freshmen and seniors, "four times as many [seniors] feel that they have had to spend too much time earning their expenses."

A significantly higher percentage of active students in publicly than in

privately controlled institutions checked items A, D, C, and F, connoting satisfactory student adjustment. On the other hand, a significantly higher percentage of active students in private institutions checked items G and I indicating frustration regarding amount of time devoted to earning money for college expenses and failure to obtain scholarship assistance. In connection with this latter item it will be recalled that 20 percent of the active students in privately controlled institutions received institutional scholarship assistance, as compared with less than 16 percent in institutions under public control (table 27).

There were practically no differences between the reactions of active students in publicly and in privately controlled institutions to statement E, "I have had little difficulty thus far in meeting college expenses." Table 21 showed that the median of estimated family incomes of students in publicly controlled institutions in 1956 was somewhat higher than that for privately controlled, $6,373 v. $6,206. (The $167 difference is significant at the 0.05 level). Lest mistaken generalizations be drawn concerning the relationship here suggested, attention is called to the fact that other elements are involved. For example, only students from homes with very

TABLE 28. — *Reactions of active students to college experiences, by control: 1956–57*

Statement	Percent checking statement as applicable		
	Total	*Public*	*Private*
A. I have been generally interested in my studies	89.7	92.0	86.8
B. I have been satisfied with my grades	50.5	50.0	51.0
C. I have been satisfied with most of my teachers	80.8	83.7	77.3
D. I have had ample time for social activities	65.0	66.7	62.8
E. I have had little difficulty thus far in meeting college expenses	64.8	65.7	63.6
F. I have found sufficient time to participate in non-academic activities	50.4	51.9	48.5
G. I have had to spend too much time earning my expenses	14.0	11.9	16.7
H. I have clear educational objectives	63.6	64.1	63.1
I. I have tried to get scholarship assistance (or additional scholarship assistance) but have not succeeded	11.5	10.7	12.5
J. I feel that at times I have been treated unfairly by (college) particularly with respect to _____	11.4	11.1	11.7
K. I have tried to obtain employment to help meet my college expenses but have not succeeded	4.8	4.4	5.3

limited income are admitted to Berea College, a privately controlled institution. Students at Pratt Institute and Temple University generally live at home, while those at Indiana University, Pennsylvania State University, and the University of Connecticut live away from home or commute considerable distances. An example of a more subtle influence is the relative degree of competition for area students experienced by publicly controlled Wayne State University in Detroit and the University of Tennessee in Knoxville, which experience little local rivalry, as compared with the two privately controlled institutions, Pratt Institute in Brooklyn and Temple University in Philadelphia.

Reflection on the fact that nearly 90 percent of the sample of active students reported general interest in their studies (statement A) and fewer than two-thirds said they had clear educational objectives (statement H) raises some doubt about the usually assumed close relationship between goal consciousness and interest in content leading to attainment of the goal. Commenting on the relatively light positive response to Item H, Pennsylvania State University wrote, "It could be that some students do not know why they are in college at all. Possibly . . . others do not know 'what they want to be'." It is probably true that a considerable number of students do not identify their studies very closely with their educational objectives.

An analysis of the responses of 2,108 students in 3 special-purpose

TABLE 29. — *Reactions of dropouts to college experiences by control: 1956-57*

Statement	Percent checking statement as applicable		
	Total	*Public*	*Private*
A. I was not sufficiently interested in my studies	31.5	31.3	32.1
B. My grades were too low	37.3	32.0	46.3
C. I was dissatisfied with some of my teachers	23.6	23.3	23.9
D. My social activities were too limited	11.8	11.1	12.9
E. I had difficulty meeting financial costs	23.6	23.8	23.3
F. I became involved in too many non-academic activities	8.2	5.4	12.9
G. I had to spend too much time earning my expenses	11.9	13.2	9.9
H. I had no clear educational objectives	28.1	26.2	31.3
I. I felt I was treated unfairly by the (college)	5.3	4.7	6.4
J. I planned to get married and could not afford to stay at _____	8.1	8.5	7.3
K. I tried to get a scholarship but did not succeed	3.2	3.1	3.4

institutions — Maryland State Teachers College at Towson, Georgia Institute of Technology, and Pratt Institute — showed that 92 percent of the active students reported interest in studies and 69 percent reported clear educational objectives. The corresponding percentages for 3,518 students in 8 liberal arts colleges were 91 and 62, and for 6,634 students in 7 universities, 88 and 62. The percentage difference between interest in studies and clear educational objectives was 23 for the 3 special-purpose institutions, 29 for the 8 liberal arts colleges, and 26 for the 7 universities.

The percentage point gap between interest in studies and clear educational objectives ranged from 14 to 50 among the 18 individual institutions. This suggests a possible technique for obtaining indices of institutional traits through student self-appraisals. Such indices could prove helpful to both enrolled and prospective students in sketching a picture of relative student purposiveness within and among institutions.

In every institution only a small percentage of respondents felt they were treated unfairly. The grievances reported were in the classic tradition — quality of the food, compulsory chapel, bookstore prices, seating at athletic events, grades awarded by individual instructors, and, in a more modern vein, traffic and parking problems. Annoyance with administrative decisions or abstract matters of principle were infrequent. Although twice as high a percentage of active students as dropouts had "unfair incidents" to report (11.4 v. 5.3), the nature of the complaints varied little between the two groups.

The one most important reason prompting the decision to withdraw from college (Chapter 4), was "poor grades" and was given a significantly greater emphasis by students from privately controlled institutions. Similarly, in recalling their experiences, statement B, "My grades were too low," struck a familiar chord. Here again, a considerably higher percentage of students from privately than from publicly controlled institutions indicated dissatisfaction with their grades — 46 percent v. 32. For the dropout group in general, "experiences in college" paralleled "reasons for dropout," in terms of the secondary importance of financial factors. Statements with academic overtones, expressed either as "experiences" or as "reasons," were clearly paramount among the withdrawal group.

Several institutions noted that students whose estimated family incomes were in the lower brackets expressed a greater degree of satisfaction with college experiences than did students from higher income groups. Pennsylvania State University, for example, found that students whose family incomes were below $3,000 responded positively to a much greater degree than did students in any other income bracket. Similarly, Bowling Green State University reported that lower-income students tended to rate their experiences as satisfactory with proportionately higher frequency than did those in high- or moderate-income groups. At Bowling Green, satisfaction with teachers, interest in studies, and presence of clear educational objectives characterized the responses of students in the lower-income group. Colgate University, in addition to finding that students with family incomes

under $10,000 were "consistently more satisfied with their own performance and with the college," also observed that "students who earn more than ten percent of their college expenses also seem to be more satisfied."

Interest (or lack of it) in studies and satisfaction (or dissatisfaction) with grades and teachers attracted the highest percentages of response from both active and dropout students. It is difficult to evaluate the "satisfaction" with grades expressed by 50.5 percent of the enrolled students. It can be assumed that these students felt that their grades accurately reflected performance. Non-response may have indicated a feeling that greater efforts might have meant higher grades, even though grade levels might have been academically acceptable. For the dropouts, the flat statement "My grades were too low" left less room for speculation.

The fact that the relationship between "clear educational objectives" and "general interest in studies" is far from mutually supporting may mildly suggest the persistence of an academically but not vocationally motivated group of students whose allegedly decreasing number is being lamented in some quarters. Pemberton's 1963 study of 334 seniors graduated in 1960 from the University of Delaware lends support to this finding.[1] The most able and productive students (60) were characterized by an "academic-theoretical motivational pattern . . . positively correlated with a preference for intellectual challenge and personal independence and negatively correlated with vocational and economic motives."

Four-fifths of active students had been satisfied with most of their studies, with a significantly higher percentage of student satisfaction with studies in public institutions than in private. Fewer than one-fourth of dropouts expressed dissatisfaction with some of their college teachers; there was no difference between the percentages from public and from private institutions.

Despite the fact that college scholarship assistance was available to a larger percentage of enrolled students in private institutions than in public institutions, a significantly higher percentage of private college students indicated lack of success in obtaining a scholarship or augmenting one already held.

Two-thirds of the active students had managed to meet the costs of college-going with "little difficulty." Fewer than one-fourth of the dropouts reported difficulty in meeting financial costs.

Three of the statements presented to active students were almost identical to three of the statements presented to dropouts, namely:

I had (have) to spend too much time earning my expenses.
I tried (have tried) to get a scholarship but did not succeed . . .
I felt (feel) I was treated unfairly by the (college).

Since a significantly higher percentage of active students than of dropouts subscribed to each of these statements, it can be inferred that these factors were not important deterrents to persistence in college.

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[1] W. A. Pemberton, *Ability, Values, and College Achievement*. University of Delaware Studies in Higher Education, No. 1, University of Delaware, Newark, 1963.

Chapter 8

Overview

This study was designed to inquire intensively into (1) the quantitative impact of multiple applications on schools and students, (2) the factors influencing college attendance and withdrawal, and (3) the reactions of students to their college experiences. Matters of concern to individuals and to institutions were involved. Generalizations from the findings regarding institutions must be limited; those regarding individuals are undoubtedly more reliable.

Competition for able students among institutions of higher education continues to be keen, and recruitment still plays a major part in the admissions process. Competition among students is also keen and accounts in large part for the fact that the ratio of the number of applicants to the number of applications is approximately 1 to 3. Nearly two-thirds of all applications are approved for admission. Therefore Institution A must recognize that, on the average, one other institution has also admitted and could be expecting to enroll each applicant Institution A has admitted. This makes it important that each institution know its competition in order to gauge correctly what proportion of its admissions will result in registrations.

In 1956 a total of 611 per 1,000 applicants were admitted to the 20 institutions in the study; in 1957 the number per 1,000 was 635. The numbers per 1,000 admittants who registered in the 20 institutions were 714 in 1956 and 687 in 1957. Both differences for these institutions were too great to be attributable to chance. The mean number of applications filed per applicant was 3.28 in 1956 and 3.21 in 1957. Students admitted by one institution were generally admitted by all of the institutions to which they applied.

Approximately 4,100 students who were admitted but who did not register in the 20 colleges in 1956–57 and 1957–58 reported the amounts they paid in nonrefundable application fees. For 2,583 prospective students who remitted fees, the mean amount paid was $23.45. Because students who paid application fees to one institution generally paid to all institutions to which they applied, about two-thirds of the total amount involved went to institutions in which they did not enroll. These figures, applied to the total applications over the nation, represent an impressive financial waste to both student and institution.

Some relief would result if parents, students, and counselors were to take a more realistic attitude toward filing applications. Alumni must

realize that not all colleges can accept all of the sons and daughters of all their graduates. The cutting score in many colleges today would, if it had been applied to the earlier generations, have excluded surprising numbers of the alumni, even some of the heavy contributors. Procedures designed to obtain a letter of acceptance from a prestige institution which the applicant has no intention of entering are recognized for what they are by the institution, as well as by friends who are bored by hearing about the letter. Secondary schools that establish the indiscriminate "rule of three" or some other magic number of applications that all applicants must file would do well to study their records and discover the waste being generated by this practice. On the other hand, colleges could design and install better road signs to admission — in their catalogues, at "college night" representations, and through communications to alumni and friends. Strict adherence to a policy of using scholarship funds not to buy students into the colleges but to make it possible for able, needy students to enter the colleges of their choice would do much to correct the current misconceptions associated with these funds. Happily, reformations are in evidence.

Students who were no-shows of the 20 colleges tended to go to institutions in other States, particularly no-shows of privately controlled institutions. Four of 5 no-shows of privately controlled institutions went to other privately controlled institutions, and nearly 3 out of 5 no-shows of publicly controlled institutions also went to privately controlled institutions. There was evidence to suggest that some no-shows in publicly controlled institutions had applied to these institutions as an insurance measure. The reason most frequently given as the one most important in choice of college was "high scholastic standing," followed by "curriculum offered," and "scholarship assistance." In terms of percent of mentions among multiple reasons, "high scholastic standing" again ranked first, "scholarship assistance" second, and "less expensive," third. If these reasons given for selecting an institution of higher education represent a rough scale of student values, it is evident that some revisions are necessary in the popular conception of what makes a college attractive to students. Such elements as athletic record, location, size, and physical plant fade in importance beside the big 4 — academic reputation, courses wanted, scholarship assistance, and cost.

The no-shows of the 20 colleges who did not enroll in any college represented about 14 percent of the total — 18 percent in publicly controlled and 7 percent in privately controlled institutions. More than half of those who had not enrolled anywhere named factors with financial implications as the most important reasons for failure to enroll. About 43 percent of these non-enrolled admittants were still interested in enrolling in the participating institution that reported them as no-shows; 35 percent were interested in enrolling in some other institution, and about 22 percent were no longer interested in enrolling in any institution. There was evidence of many potentially excellent college students in this latter group.

Seven of 10 institutions for which data were available found that the

no-shows of their institutions were of higher quality than the active students as measured by mean standing in high school graduating class. By the same measure, active students were superior to dropouts. Women exhibited their usual higher average standing in high school graduating class over that of men.

It was not possible for the institutions to report a longitudinal dropout rate because samples were drawn on the basis of the numbers enrolled at each class level rather than on the basis of the numbers that were in the classes when they entered. Academic difficulties led the list of most important reasons for dropout, followed by health and family reasons (which included marriage), and financial reasons. Academic reasons for dropping out were given as most important 3 times as often as financial reasons — about twice as often by dropouts from publicly controlled institutions and 5 times as often by dropouts from privately controlled institutions. When dropouts reported contributing factors, financial difficulties led the list in frequency of mention. Academic difficulties were second, followed by lack of interest in studies, which, if interpreted as an academic difficulty, would place this factor at the head of the list.

About 50 percent of the college expenses of the average active student were defrayed from funds provided by the family, 20 percent from personal savings, 10 percent from off-campus work, 4 percent from on-campus work, 4 percent from college scholarships, and about 12 percent from other sources. The dropout defrayed an average of about 25 percent of his expenses from personal savings, and slightly smaller percentages from the other sources than did the active students.

Nearly 25 percent of no-shows who enrolled in other institutions received scholarship aid from the institutions in which they enrolled, in contrast to 18 percent of the active students in the reporting institutions who were receiving scholarship aid from institutional funds. Only 3 of 15 institutions were providing a higher percentage of their active students with scholarship assistance than the percentage of their no-shows who were receiving such assistance in the institutions they attended.

Of more than 10,000 students reporting, 45 percent were employed while they were students. Almost 45 percent of those employed were engaged in clerical and sales work, 22 percent in professional, semiprofessional, and managerial jobs, and 20 percent in service occupations. The average number of hours worked per week was 18. A significantly higher percentage of active students were employed part-time or full-time in privately controlled than in publicly controlled institutions. A significantly higher percentage of students were employed in institutions located in population centers of over 100,000 than were employed in institutions in smaller population centers. These students were able to work more hours and at a higher level of employment, a situation worthy of consideration by prospective college students who must depend upon personal earnings to meet expenses while attending college.

About 85 percent of the active students in the 20 colleges in 1956–57

definitely planned to reenroll. The 15 percent who were uncertain or did not plan to reenroll mentioned financial, academic, and health and/or family difficulties, in that order, as the reasons for not returning to complete their college work.

Opportunities to attend college were not restricted to the children of above-average income families. More than one-fourth of the students estimated their family incomes in 1956 at levels below the $4,783 median for that year.

Although lack of funds did not emerge as the primary cause of attrition, it was nonetheless influential in determining the course of events for many students. For the no-shows who went elsewhere and the no-shows who went nowhere, money was frequently the determinant. The impression remains that, had earlier decisions been made regarding the allocation of institutional scholarship and loan funds, had greater employment opportunities been made available during the academic year, and had choices of college been made more wisely, decisions to go to college or to remain in college might have been more favorable for many students with bright prospects for success in college and beyond.

Appendix A

The 20 Institutions and Their Representatives

Publicly Controlled Institutions

Bowling Green State University, Bowling Green, Ohio
Glenn Van Wormer, Registrar and Director of Admissions.

Eastern Michigan University, Ypsilanti, Mich.
William C. Lawrence, Vice President for Student Affairs.

Georgia Institute of Technology, Atlanta, Ga.
W. L. Carmichael, Registrar.

Indiana University, Bloomington, Ind.
Charles E. Harrell, Registrar.

Mary Washington College of the University of Virginia
Fredericksburg, Va.
Edward Alvey, Jr., Dean.

The Pennsylvania State University, University Park, Pa.
C. O. Williams, Assistant to the President for Special Services.

State Teachers College at Towson, Baltimore, Md.
Rebecca C. Tansil, Director of Admissions.

The University of Connecticut, Storrs, Conn.
Franklin O. Fingles, University Registrar.

The University of Tennessee, Knoxville, Tenn.
R. F. Thomason, Dean of Admissions and Records.

Wayne State University, Detroit, Mich.
Margaret Ruth Smith, Administrative Assistant.

Privately Controlled Institutions

Berea College, Berea, Ky.
James H. Dean, Registrar.

Carson-Newman College, Jefferson City, Tenn.
Warren L. Weierman, Director of Public Relations.

Colgate University, Hamilton, N. Y.
Carl A. Kallgren, Dean of the University.

Cornell University, Ithaca, N. Y.
David A. Warren, Associate Registrar.

Georgetown University, College of Arts and Sciences, Washington, D.C.
Joseph G. Connor, University Registrar.

Gettysburg College, Gettysburg, Pa.
Charles R. Wolfe, Dean of Admissions.

Grinnell College, Grinnell, Iowa
Robert C. Sauers, Director of Admissions.

Massachusetts Institute of Technology, Cambridge, Mass.
Richard W. Willard, Statistical Analyst.

Pratt Institute, Brooklyn, N. Y.
Louis Rabineau, Vice President for Student Affairs.

Temple University, Philadelphia, Pa.
John M. Rhoads, Vice Provost.

Appendix B

Forms and Schedules

Form A. Data on First-Time Students — Fall of 1956.

Form E. Data on First-Time Students — Fall of 1957.

Form B. Report on College Application, Admission, and Registration.

Form C. Report on Circumstances Attending Discontinuance of Attendance.

Form D. Information From Active Student Body Concerning Problems of Meeting College Expenses.

20 INSTITUTION COOPERATIVE RESEARCH STUDY

***Form A.* Data on First-Time Students — Fall of 1956**

Institution ....., including all undergraduate schools, colleges, departments, or branches, except .....

Item, number of —	Total		Degree candidates	
	Men	Women	Men	Women
1. Applicants				
2. Admissions				
3. All registrants				
3a. Part-time registrants				
4. All registrants completing 1st period				
5. All reductions during 1st period				
5a. Part-time reductions during 1st period				
6. Re-registrants — 2nd period				
6a. Part-time re-registrants — 2nd period				
7. All completions — 1st year				
7a. Part-time completions—1st year				
8. All reductions—2nd period				
8a. Part-time reductions—2nd period				

NOTE: Item 3 minus item 3a should equal full-time registrants, and so on. Each "a" item subtracted from the one above should give full-time students in the group.

Form E. Data on First-Time Students — Fall of 1957

Institution ....., including all undergraduate schools, colleges, departments, or branches, except .....

Item, number of —	Total		Degree candidates	
	Men	Women	Men	Women
1. Applicants				
2. Admissions				
3. All registrants				
3a. Part-time registrants				

NOTE: Item 3 minus Item 3a should equal total full-time students enrolled for the first-time-in-any-college in the fall of 1957.

1. To be counted as an *Applicant* a prospective student must have filed an application for admission, in proper form, to the class entering in the fall of 1957 as a first-time-in-any-college student in one of the undergraduate schools, colleges, or departments in the study. He must have submitted, or caused to be submitted, certificates, credentials, and deposits as required by the institution to permit a firm determination regarding eligibility for admission. Advanced standing or transfer applications are *not* to be included.

2. To be counted as an *Admission* the institution must have issued to the applicant an official notification of acceptance, admission, or invitation to enroll. Students admitted conditionally or on probation are to be included. To qualify as an admission a student must also qualify as an applicant as defined in 1 above. A student who could have registered before the fall of 1957 because of prior admission should be included only if re-application is not required. Prior admission does not count if re-application and re-admission are required.

3. To be counted as a *Registrant* a student must qualify under 2 above; he must be formally enrolled, must have paid or arranged for payment of tuition, fees, deposits and other prescribed charges, and must have necessary credentials for admission to classes.

Form B. **(College Letterhead, if Desired)**

Report on College Application, Admission, and Registration

Name .....

1. List the institutions with which you filed a formal application for admission to the fall of 1956 entering class and indicate, by a check-mark, what action was taken by each institution. (Do not include institutions from which you withdrew your application before final action had been reported to you by the institution.)

Name of institution	Admitted		Placed on waiting list	Rejected
	Without condition	With condition(s)		
A.				
B.				
C.				
D.				
E.				
F.				
G.				
H.				
I.				

2. What was the total amount you paid to the above institutions in the form of non-refundable application fees? $.....

Items 3 Through 8 Apply Only to Students Who Enrolled in an Institution of Higher Education During the School Year 1956-57

3. Institution in which you enrolled .....
When? .....

4. Are you now enrolled? Yes..... No..... If not, when did you leave? During or at end of first registration period .....
After beginning of second registration period .....

5. Among the considerations listed below, check the three (3) you believe were the most influential in your decision to enroll in the institution you named in Item 3. Add others if they apply.

.....A. Near enough to my home (so that I could commute)
.....B. Received financial assistance from the institution in the form of a scholarship
.....C. High scholastic standing of the institution
.....D. Friends were going there
.....E. Parent(s) wanted me to go there
.....F. Less expensive than other(s) to which I was admitted
.....G. Institution had good intercollegiate athletic record
.....H. Student activities and social opportunities
.....I. Buildings and other features of the campus
.....J. .....
.....K. .....
.....L. .....

6. Were you awarded any form of financial assistance by the institution in which you enrolled? Yes..... No..... If your answer is yes, what is the approximate amount (or equivalent) for a school year in the form of: Scholarship Grant (include remission of fees and tuition)?
$..... Student Loan? $..... Work Opportunity $.....

7. Did you receive financial assistance from other sources applicable only to the institution in which you enrolled? Yes..... No.....
If your answer is yes, in what form?.....
In what amount per year $.....

8. What one factor do you think was most important in determining the institution you entered? .....
.....

Items 9 Through 11 to be Answered Only if You Did Not Enroll in an Institution of Higher Education During the School Year 1956-57

9. Check the three (3) most important reasons for your failure to enroll.

.....A. I was not admitted to school of my first choice.
.....B. I could not afford to attend any of the institutions to which I was admitted.
.....C. I was drafted for military service.
.....D. I enlisted for military service.
.....E. I took a full-time job.
.....F. I became ill.

.....G. I was needed at home.
.....H. .....
.....I. .....
.....J. .....

10. Are you still interested in entering college? Yes..... No.....
If your answer is yes, where? .....
When? .....

11. What do you think was the *one* most important factor that influenced your decision not to attend college this year? .....
.....
.....

Please Answer Items 12 and 13 Regardless of Whether or Not You Entered College This Year

12. Some authorities propose that colleges award the greater part of their limited scholarship funds on the bases of need and performance in college rather than the bases of high school records, test results and/or recommendations.

In general, how do you feel about the proposition? Agree.....
Disagree.....

Please check the statement(s) below which best represent(s) your reactions to the proposition.

.....A. Many good students need scholarship aid even to get started in college.
.....B. Too much scholarship money is wasted on poor or mediocre students.
.....C. Colleges must use scholarship funds to attract athletes, debaters, dramatic stars, musicians, and others with specialized abilities.
.....D. Brilliant students should be recognized by scholarship awards regardless of need.
.....E. High school grades and test results are dependable indices of performance in college.
.....F. .....
.....G. .....

13. If we find that there are additional questions we would like to discuss with you would you be willing to be interviewed, either in person or by telephone?

Yes..... No..... If your answer is yes, please give the address and telephone number where you can be reached in the next few weeks.

.....
(Address)
....
(Telephone)
OR .....
(Address)
....
(Telephone)

Form C. **Report on Circumstances Attending Discontinuance of Attendance**

1. Name .....

2. Have you enrolled in another institution since leaving _____?

Yes..... No..... If so, where? .....

..... When? .....

If not, do you plan to enroll in another institution? Yes.....

No..... If so, where? .....

3. Do you plan to return to_____? Yes..... No.....

If so, when?.....

4. Are you now employed? Full-time..... Part-time.....

No..... If so, what is the nature of your work? .....

5. What is your one most important reason for dropping out of?_____

6. List, in order of importance to you, the other factors that caused you to drop out_____

7. Under what circumstances would you have continued as a student at _____?

8. Report, for the total period of your college attendance, your estimates of the amounts and percentages of funds, in terms of sources, that were devoted to defraying your total college expenses. (Include in total expenses such items as tuition, fees, books and supplies, room rent, meals, fraternity or sorority dues, recreation and entertainment, health, grooming, clothing, laundry, travel, and contributions to church and charity. If, for example, you waited on tables for part of all of your meals, estimate the cash equivalent of such work.) Write O on the line for each item that was not a source of funds.

.....% Family, including relatives
.....% Personal savings*
.....% On-campus work**
.....% Off-campus work**
.....% Church
.....% Civic organization(s)
.....% College scholarship(s)
.....% Other scholarship(s) — specify
.....
.....% College loan funds
.....% Other loan(s)
.....% Other funds — specify
.....

* Include savings from summer earnings. ** While in school.

9. Check the statements below that are essentially true as they relate to your experiences at _____:

.....A. I was not sufficiently interested in my studies.
.....B. My grades were too low.
.....C. I was dissatisfied with some of my teachers.
.....D. My social activities were too limited.
.....E. I had difficulty meeting financial costs.
.....F. I became involved in too many non-academic activities.
.....G. I had to spend too much time earning my expenses.
.....H. I had no clear educational objectives.
.....I. I felt I was treated unfairly by the (college).
.....J. I planned to be married and could not afford to stay at _____.
.....K. I tried to get a scholarship but did not succeed.

10. If we find that there are additional questions we would like to discuss with you would you be willing to be interviewed, either in person or by telephone? Yes..... No..... If your answer is yes, please give the address and telephone number where you can be reached in the next few weeks (1) and after June ..... (2).

Next few weeks:

(1) ....
(Address) (Telephone)

After June:

(2) ....
(Address) (Telephone)

Form D. Information from Active Student Body Concerning Problems of Meeting College Expenses

Twenty higher educational institutions are engaged in a cooperative research study being coordinated by the United States Office of Education in an effort to determine the importance of the financial factor as a cause for student retention, transfer, and dropout. We are happy to have the opportunity to contribute our part to this study, but we need your help. Will you please furnish the information requested on this form and return it in the enclosed stamped, addressed envelope? Note that you may sign your name if you wish, but your signature is not required. Returns will be treated anonymously in either case. It would be helpful, however, if we knew who had and who had not returned the completed form.

1. Report, for the total period of your college attendance, your estimates of the percentages of funds, in terms of sources, that were devoted to defraying your total college expenses. (Include in total expenses such items as tuition, fees, books and supplies, room rent, meals, fraternity or sorority dues, recreation and entertainment, health, grooming, clothing, laundry, travel, and contributions to church and charity. If, for example, you waited on tables for part or all of your meals, estimate the cash equivalent of such work). Write O on the line for each item that was not a source of funds.

.....% Family, including relatives
.....% Personal savings*
.....% On-campus work**
.....% Off-campus work**
.....% Church
.....% Civic organization(s)
.....% College scholarship(s)
.....% Other scholarship(s) — specify
.....
.....% College loan funds
.....% Other loan(s)
.....% Other funds — specify
.....

* Include savings from summer earnings.
** While in school.

2. In the table below, check the bracket that represents your estimate of your parent's or parents' 1956 income (wages, salaries, profits, interest, dividends).

Loss	( )	$4,000 – $4,999	( )
$0 – $ 999	( )	5,000 – 5,999	( )
1,000 – 1,999	( )	6,000 – 6,999	( )
2,000 – 2,999	( )	7,000 – 9,999	( )
3,000 – 3,999	( )	10,000 or more	( )

3. Check the statements below that are essentially true as they relate to your experiences at (*college*).

.....A. I have been generally interested in my studies.
.....B. I have been satisfied with my grades.
.....C. I have been satisfied with most of my teachers.
.....D. I have had ample opportunity for social activities.
.....E. I have had little difficulty thus far in meeting college expenses.

.....F. I have found sufficient time to participate in non-academic activities.

.....G. I have had to spend too much time earning my expenses.

.....H. I have clear educational objectives.

.....I. I have tried to get scholarship assistance (or additional scholarship assistance) but have not succeeded.

.....J. I feel that at times I have been treated unfairly by (*college*) particularly with respect to .....
.....

.....K. I have tried to obtain employment to help meet my college expenses but have not succeeded.

4. Are you now gainfully employed (A) Full-time? ☐; Part-time? ☐. Not at all ☐. If so, for how many hours per week? .....
What is the nature of your work? .....
.....

5. *Do you plan to re-enroll for further study at (*college?*) Yes ☐; No ☐; Uncertain ☐. If your answer is "no" or "uncertain" please state what changes in circumstances, either at the college and/or with you, would change your plans with reference to re-enrollment.

.....

.....

Name (Optional) .....Class of 19..... Date 1957

.....

*Students who expect to graduate no later than this summer may omit this item.

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